

TRAIL & *Landscape*

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NATURAL HISTORY AND CONSERVATION



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—founded 1879—

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from the Editor...

Trail & Landscape marks the beginning of Volume 16 with a Canadian milestone. This issue is devoted to the first up-to-date regional fauna of the butterflies of a Canadian city. Written by the enthusiastic trio of Ross Layberry, Don Lafontaine and Peter Hall, *Butterflies of the Ottawa District* presents a concise yet readable account of the current knowledge of the 94 local species and an additional 8 possible species.

Accompanying the text are plates illustrating diagnostic features not well described in the field guides, and distribution maps for each species. There are a total of 4459 points on these maps, 95% of them from Ross Layberry's records! Ross has prepared complete documentation for each and every point and has deposited this information in the Club's file in the Public Archives. Flight season graphs show you at a glance what is flying when for the 78 most common species, and also give evidence for single and multiple broods, migrants and winter hibernators.

Read it now; carry it with you in the field, and try to fill in some of the remaining gaps in our knowledge of Ottawa's butterflies. Additional information on all species will be welcomed by the authors.

Regular *Trail & Landscape* articles begin on page 60.

Welcome, New Members

Ottawa Area

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Verona, Ontario

Ken Nicholls
Georgetown, Ontario

If you know any of our new members or meet them, make them welcome and introduce them to others.

Butterflies of the Ottawa District

*Ross A. Layberry
J. Donald Lafontaine
Peter W. Hall*



Introduction

The Ottawa District has a wide variety of habitats that have attracted a relatively large number of resident and migratory butterfly species. Over the years, it has also had a large number of butterfly collectors and observers who have, perhaps, given it one the best reported and recorded butterfly faunas in Canada.

In 1968, Don Lafontaine published in *Trail & Landscape* a checklist of the butterflies known to have occurred in the District. The list at that time contained 83 species. This number was increased in an update of the list published in *Trail & Landscape* in 1972.

Much new information has been added in the past decade thanks largely to extensive field work carried out by many enthusiastic butterfly observers, particularly Ross Layberry. This activity has culminated in the organization of a butterfly group within The Ottawa Field-Naturalists' Club that became active in the summer of 1981. In addition, some old records in the Canadian National Collection at the Central Experimental Farm that were overlooked until now have been sought out.

All these records have been compiled and appear in this updated article on the 94 species of butterflies now known to have occurred in the Ottawa District. It is unlikely that a comparable list of species exists for any other city in Canada. The text and maps include sight and collection records, as well as records of ova and larvae where identification could be confirmed. Four species are included (indicated by *) of which, for various reasons, no specimens now exist from within the District.

This article is not designed as a descriptive field guide. For that purpose, the reader should use *A Field Guide to the Butterflies* by Alexander Klots, (Houghton Mifflin Co., Boston, 1951), still the best general text for identifying butterflies in eastern North America. For each species in this article, a reference is given to the plate in Klots where the species illustration can be found. Where confusing species from the Ottawa District are not adequately illustrated in Klots, photographs showing the diagnostic features are included in this article.

Since the publication of Klots' book, many of the scientific names in use have changed. For the current scientific name, *A Catalogue/Checklist of the Rhopalocera of America North of Mexico* by Lee D. Miller and F. Martin Brown, 1981, should be consulted.

Where the subspecies found in the Ottawa District is not the nominate one, the subspecific name is also given. The species are listed under their common names, which have not changed from those used by Klots. The family order followed is that of Miller

and Brown, which is basically reversed from Klots.

Under each species is included the abundance in the Ottawa District, the habitat where the species can be found, the flight season, the known foodplants of the larvae (based on local records where possible) and a section of remarks that will aid the observer in the field to identify the butterflies by their habits or unique characteristics. In addition, for each species there is a distribution map showing where the species has been recorded within the Ottawa District.

The Ottawa District (shown below) is the area within a circle of 50 km radius, centred on the Peace Tower; this circle appears on each distribution map. This area is covered by maps 31F and 31G of the 1:250,000 series available from the Department of Energy, Mines and Resources, Ottawa. The full documentation of all the distribution records on the maps has been deposited in the Club's file in the Public Archives.



The Ottawa District

The definitions of the terms used for the categories of abundance caused more discussion among the authors than any other point, although rarely was there disagreement as to the category to which a species belonged. This presumably means that while the method of estimating the category of abundance is highly subjective, the status given is probably relatively accurate.

Abundant: a species which is extremely common and often encountered in very large numbers.

Common: a species which is encountered every day in numbers large enough that they are frequently visible.

Uncommon: a species which is encountered most days, but only in small numbers.

Rare: a species which is only occasionally encountered, sometimes not once in a whole year, and when encountered, usually no more than a few are seen.

Extremely Rare: a species for which there are few records, and which is not seen at all most years.

Local: a local species is one which is known only from a few localities, or more often, one which is highly restricted to a very specific habitat, even if many colonies of it are known.

It must be emphasized that these definitions apply only under ideal conditions, that is, in the right season, in the right habitat, and in sunny weather. Flight seasons, as given in the text, apply to years with average weather conditions. Further details on flight seasons are given in the bar graphs at the end of the article for all except the rarest species.

All common and scientific names given for larval foodplants follow those used by John M. Gillett and David J. White in their *Checklist of Vascular Plants of the Ottawa-Hull Region, Canada*, National Museum of Natural Sciences, 1978.

At the end of the article is a list of species that could possibly be added to the butterfly fauna of the Ottawa District and a bibliography of books and articles that could be useful in identifying butterflies found in the District.

The authors would like to thank all those who helped make this article possible, particularly Joyce Reddoch for her editorial assistance, Marc Guertin for his work on the graphic art, Charlie Beddoe for the excellent photographs appearing in the article, and Joan Layberry for typing the final draft.

Butterflies and Moths

CLASS *INSECTA*

ORDER *LEPIDOPTERA*

BUTTERFLIES AND MOTHS

This order is made up of the butterflies and moths, probably the most familiar insects. They can be distinguished from all other insects by two features: the rows of microscopic scales covering the wings and the possession of a hollow, coiled feeding tube, or proboscis, in the adult. No other insects have a combination of these two characters.

For most people first introduced to this order, the basic problem is in distinguishing between butterflies and moths. The old stand-by rules that moths are dull and fly by night while butterflies are colourful and fly by day are only partially correct and can be confusing.

There are, however, two sure ways to distinguish between the two. Butterfly antennae are strongly clubbed at the tips. Moth antennae are never clubbed. In addition, the two pairs of wings in moths are coupled by a bristle-like arrangement, called the frenulum. In butterflies the coupling is accomplished by an overlapping of expanded areas of the wing margins.

These characters are not much use to an observer in the field. However, there are several 'rules of thumb' by which most day-flying moths can be told from butterflies on the wing, with practice.

Most butterflies, even the smaller ones, fly in a purposeful manner, while most small moths fly erratically and weakly. Butterflies tend to choose their landing spots carefully, while moths appear to 'crash-land' on the ground or deep in the vegetation. Butterflies at rest fold their wings vertically above the back or spread them horizontally to catch the sun's rays. Most moths when at rest fold their wings covering the body, with the wings sloping on each side like a tent.

FAMILY *HESPERIIDAE*

Skippers

This family, with 27 local species, is the one which creates the most identification problems, and not only for beginners. Most Skippers have a stout body, a wide head and antennae with the clubs extended into a fine point, often bent at an angle to the shaft of the antennae. The wings are small relative to the size of the body. Most Skippers do not flap their wings like other butterflies but move them so fast that they become a blur.

The ova are more or less spherical, often with fine ridges and cross-ribs. The larvae are relatively hairless, with a large head, accentuated by the slim prothorax (the first segment of the thorax), which gives the impression of a neck. Most live in nests of folded leaves, which makes them very difficult to find. Pupation takes place in the leaf-nest or among the ground litter, often inside a loosely-woven cocoon.

Our Skippers are divided into two sub-families, the *Pyrginae* and the *Hesperiinae*. The *Hesperiinae* are small, usually orange-brown, butterflies fond of visiting flowers. The males of most species have a dark 'brand' or stigma on the upper surface of the forewings. Females can be very difficult to identify, often resembling females of related species much more than their respective males. Many of the best identification features are on the underside of the wings. All use grasses and sedges as their larval foodplants. From their often limited distribution, it is certain that many use only a limited number of grass species, but very few specific foodplant records are available, and none from the Ottawa District.

Our *Pyrginae*, the first eight Skippers on the list, are small or medium size, gray or dark brown Skippers. Some are regularly seen on flowers, but one group, the Dusky Wings, prefers to alight on the ground, with their wings pressed to the ground surface. They do not move their wings as fast as the *Hesperiinae* but are still very powerful fliers. None of their larvae feed on grasses or sedges, using instead many other families of plants.

SILVER SPOTTED SKIPPER *Epargyreus clarus* (Cramer) K26:3, 33:1

ABUNDANCE: Rare to uncommon, local.

HABITAT: Open areas near woods, especially moist.

SEASON: Early June to late July.

FOODPLANTS: Reared locally on Hog Peanut (*Amphicarpaea bracteata*); usually reported only on Black Locust (*Robinia pseudo-acacia*).

REMARKS: The Silver Spotted Skipper is usually seen on flowers where its large size and the large silvery-white patches on the underside of the hindwings are unmistakable. It is best found by searching areas where Hog Peanut is abundant.

NORTHERN CLOUDY WING *Thorybes pylades* (Scudder) K27:5

ABUNDANCE : Common.

HABITAT : Forest margins and clearings.

SEASON : Late May to late July.

FOODPLANTS : Species in the Clover family; not reared locally.

REMARKS : This dark gray Skipper can be distinguished in the field from the Dusky Wing Skippers by its preference for landing on flowers and its habit of closing its wings above the back. Records are curiously lacking from the southeast part of the District.

DREAMY DUSKY WING *Erynnis icelus* (Scudder & Burgess) K29:1, 33:7

ABUNDANCE : Common.

HABITAT : Wood edges and clearings where the foodplants occur.

SEASON : Mid-May to late June.

FOODPLANTS : Found locally on Aspen (*Populus* spp.) and Willow (*Salix* spp.).

REMARKS : This is the commonest local Dusky Wing, and the only one lacking white spots on the forewing. The previous records of the Sleepy Dusky Wing (*Erynnis brizo*) from the Ottawa District were based on misidentified specimens. The wing marking characters given by Klots for distinguishing between the two species are not reliable.

JUVENAL'S DUSKY WING *Erynnis juvenalis* (Fabricius) K29:7

ABUNDANCE : Uncommon, locally common.

HABITAT : Wood margins and trails in dry areas.

SEASON : Mid-May to late June.

FOODPLANTS : Oaks (*Quercus* spp.).

REMARKS : Juvenal's Dusky Wing is the largest and the most powerful flier of the local Dusky Wings. The almost complete lack of records from the southeast part of the District may be due to the scarcity of the foodplant; more collecting is needed in the few dry wooded areas there.

MOTTLED DUSKY WING *Erynnis martialis* (Scudder) K29:6

ABUNDANCE : Uncommon and extremely local.

HABITAT : Very dry areas.

SEASON : Mid-May to early June.

FOODPLANTS : *Ceanothus* spp.

REMARKS : This species is found locally only in The Sand Hills at Constance Bay. The mottled hindwings are diagnostic. A second generation recorded further south has not been documented in the District, but few collectors visit The Sand Hills in mid-summer, so it may well occur there.

COLUMBINE DUSKY WING *Erynnis lucilius* (Scudder & Burgess) K29:5

ABUNDANCE : Locally uncommon in spring, sometimes common in the second brood.

HABITAT : Wherever foodplant is common.

SEASON : Early May to mid-June, early July to mid-August.

FOODPLANTS : Columbine (*Aquilegia canadensis*)

REMARKS : This is our smallest and darkest Dusky Wing. The first generation is never seen far from the foodplant, but the second is occasionally seen in numbers on the ground in damp spots on dirt roads. The larvae are easily found in their leaf-nests in the fall.

*GRIZZLED SKIPPER *Pyrgus centaureae* (Rambur)

K27:11, 33:5

ABUNDANCE : Extremely rare.

HABITAT : Sandy Pine barrens.

SEASON : Late May to July (Northern Ontario).

FOODPLANTS : Reported to be Strawberry (*Fragaria* spp.)

REMARKS : One specimen of the Grizzled Skipper was taken in The Sand Hills at Constance Bay by Bruce Di Labio on 9 July 1974.

It was unfortunately eaten by a mouse while on the spreading board. There are, however, no other similar species, so there can be little doubt as to the identification. The Grizzled Skipper has an odd distribution: a northern subspecies which has been found as far south as Cochrane, and a southern one which extends as far north as southeastern New York. The northern subspecies has been found in a variety of habitats including sandy Jack Pine areas, and the southern one seems to be confined to sandy Pine barrens. Thus The Sand Hills at Constance Bay would satisfy the habitat requirements of either subspecies.

COMMON SOOTY WING *Pholisora catullus* (Fabricius)

K28:6

ABUNDANCE : Extremely rare, not recorded recently.

HABITAT : Waste areas.

SEASON : June.

FOODPLANTS : Lamb's Quarters (*Chenopodium* spp.).

REMARKS : This small, very dark Skipper occurred locally in the District in the early 1960s but has not been seen in the last fifteen years. It may have withdrawn from the northern portion of its range.

ARCTIC SKIPPER *Carterocephalus palaemon mandan* (Edwards)

K33:9

ABUNDANCE : Common.

HABITAT : Moist wood margins and clearings.

SEASON : Late May to early July.

FOODPLANTS : Grasses.

REMARKS : The Arctic Skipper and the Hobomqk Skipper are the earliest of our local orange-brown Skippers. The squarish orange patches on the upperside, and the large round white patches beneath make it impossible to confuse this species with any other. It is commonly seen visiting Lilac and Honeysuckle flowers.

LEAST SKIPPER *Ancyloxypha numitor* (Fabricius)

K33:10

ABUNDANCE : Locally common.

HABITAT : Marshy areas and riverbanks.

SEASON : Mid-June to early July, early August to early September.

FOODPLANTS : Damp area grasses, possibly Reed Canary Grass (*Phalaris arundinacea*) locally.

REMARKS : This tiny Skipper is easily overlooked because of its small size and very local distribution within wet or marshy habitats. It has a very weak flight in among tall grass and is rarely seen on flowers. Several colonies are known on the banks of the Rideau River within the Ottawa city limits.

EUROPEAN SKIPPER *Thymelicus lineola* (Ochsenheimer)

K30:2

ABUNDANCE : Extremely abundant.

HABITAT : Everywhere except deep woods.

SEASON : Mid-June to late July.

FOODPLANTS : Grasses.

REMARKS : The European Skipper was introduced from Europe around the turn of the century and has since spread to Newfoundland and western Canada. It reached Ottawa around 1960 and was common by 1965. This species is an agricultural pest on Timothy grass and is found absolutely everywhere from downtown Ottawa to the most remote clearings in Gatineau Park. It is perhaps the only species which can be found easily after dark, roosting in large numbers on flowering plants, for example on Sweet White Clover and Alfalfa. This is the only local Skipper which overwinters in the egg stage; the ova are laid in groups on the grass stems.

LEONARDUS SKIPPER *Hesperia leonardus* Harris

K34:3,6

ABUNDANCE : Uncommon, local.

HABITAT : Open fields and dry meadows.

SEASON : Early August to mid-September.

FOODPLANTS : Grasses.

REMARKS : The Leonardus Skipper is a powerful flier and always difficult to approach, especially when on the ground around mud puddles. One of the best places to find it is along most of the length of the Eardley-Masham Road in Gatineau Park. All other similar local Skippers fly in the spring or early summer. The Laurentian Skipper (*Hesperia comma laurentina*), which has not yet been recorded in the Ottawa District, would fly at the same time but could be recognized by the greenish-gray, rather than orange-brown, hindwings beneath. (See under 'Possible Species'.)

INDIAN SKIPPER *Hesperia sassacus* Harris

K30:3, 34:4

ABUNDANCE : Uncommon, local.

HABITAT : Grassy areas in open woodlands.

SEASON : Late May to early July.

FOODPLANTS : Grasses, possibly *Panicum* spp.

REMARKS : The Indian Skipper is most likely to be confused with the much more common Long Dash. Males and females of the two species may be distinguished by the characters shown in Figures 1 to 4. The local distribution of the Indian Skipper may be due to the localized nature of *Panicum* grass in the District.

PECK'S SKIPPER *Polites coras* (Cramer)

K30:7, 35:4

ABUNDANCE : Uncommon, locally common.

HABITAT : Moist meadows.

SEASON : Late June to late July.

FOODPLANTS : Grasses.

REMARKS : Both sexes of the Peck's Skipper can be distinguished from those of other similar species by the large yellow patch on

the hindwing beneath. It is most commonly seen on flowers along dirt roads through damp areas.

TAWNY EDGED SKIPPER *Polites thermistocles* (Latreille) K35:1,2

ABUNDANCE : Common.

HABITAT : Moist meadows.

SEASON : Early June to mid-July.

FOODPLANTS : Grasses.

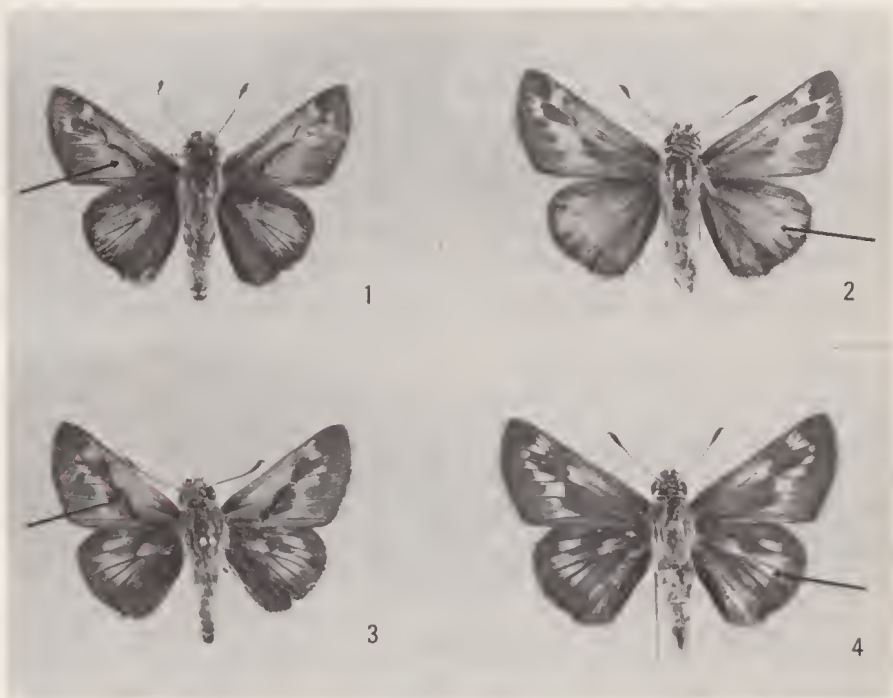
REMARKS : Males of the Tawny Edged Skipper can be distinguished from those of the Cross Line Skipper by their smaller size and their smaller, more vividly marked stigma. (Compare Figures 5 and 7.) Females can be distinguished from those of all similar species by the presence of an orange patch on the leading edge of the forewing (Figure 6).

CROSS LINE SKIPPER *Polites origenes* (Fabricius) K34:13,14

ABUNDANCE : Rare.

HABITAT : Damp meadows.

SEASON : Late June to early August.



Figures 1 - 4 Skippers, upperside, $X1\frac{1}{2}$

1. male Indian Skipper
3. male Long Dash

2. female Indian Skipper
4. female Long Dash

FOODPLANTS : Grasses.

REMARKS : This species (Figure 7) could be confused with the much more common Tawny Edged Skipper (see remarks under that species) and the Two Spotted Skipper (Figures 9 and 10). From the latter species both sexes can be distinguished by the dark brown, rather than yellowish, hindwing underside.

LONG DASH *Polites mystic* (Edwards)

K30:8, 35:3

ABUNDANCE : Common.

HABITAT : Moist meadows.

SEASON : Early June to late July.

FOODPLANTS : Grasses.

REMARKS : This species is by far the most common and widespread of this confusing group of Skippers. It can be distinguished from the Indian Skipper by the characters shown in Figures 1 to 4.

NORTHERN BROKEN DASH *Wallengrenia egeremet* (Scudder)

K34:15

ABUNDANCE : Uncommon.

HABITAT : Dry fields and meadows.

SEASON : Early July to early August.

FOODPLANTS : Grasses.

REMARKS : Females of this species cannot be reliably distinguished by wing pattern from those of the Dun Skipper (Figure 8) although the males are distinctive. The two species often occur together, with the Dun Skipper always much more common.

*LITTLE GLASSY WING *Pompeius verna* (Edwards)

K30:5,6

ABUNDANCE : Extremely rare.

HABITAT : Unknown locally but probably dry fields.

SEASON : Late June and July.

FOODPLANTS : Grasses.

REMARKS : This species is usually found well to the south of Ottawa. The only local record is a specimen taken in Gatineau Park by Anne Hanes on 27 June 1970. It was examined closely and released. Identification of this species should be easy because the pale patch on the forewing is transparent, but yellow-scaled and opaque in all similar species.

MULBERRY WING *Poanes massasoit* (Scudder)

K31:1,2, 35:6

ABUNDANCE : Rare and local.

HABITAT : Roadside sedge patches.

SEASON : Mid-July to early August.

FOODPLANTS : Narrow-leaved sedges, probably *Carex stricta* or *C. aquatilis*.

REMARKS : The Mulberry Wing is absolutely restricted to areas where narrow-leaved sedges are abundant. It was unknown in or near the District until 1980, when RAL found three colonies just east of the District and one inside the District near Winchester.



Figures 5 - 10 Skippers, upperside, $X1\frac{1}{2}$

5. male Tawny Edged Skipper 6. female Tawny Edged Skipper
 7. male Cross Line Skipper 8. female Dun Skipper
 9. male Two Spotted Skipper 10. female Two Spotted Skipper

HOBOMOK SKIPPER *Poanes hobomok* (Harris)

K30:11, 35:7,8

ABUNDANCE : Common.

HABITAT : Woodland clearings and trails.

SEASON : Late May to early July.

FOODPLANTS : Grasses.

REMARKS : A powerful flier, this species is highly territorial, often driving other butterflies away from a favoured perch. It is very fond of flowers and is often seen in numbers on Honey-suckle. Females occur in two forms, the orange-brown normal form and the uncommon, dark brown *pocahontas* form.

BROAD WINGED SKIPPER *Poanes viator* (Edwards)

K30:10, 35:10

ABUNDANCE : Uncommon and local.

HABITAT : Roadside sedge patches.

SEASON : July.

FOODPLANTS : Broad-leafed sedges, for example, Beaked Sedge (*Carex rostrata*)

REMARKS: This species is absolutely restricted to sedge patches, never flying even a few feet outside them. Often the only way to see them is to walk in the water among the sedges, flushing the Skippers from the plants. This species was unknown from the Ottawa District until 1977 when a large colony was discovered by RAL near Constance Lake, which is still the best place to find it. It is now known from more than thirty locations all over the District.

DION SKIPPER *Euphyes dion* (Edwards)

K31:9, 36:7

ABUNDANCE : Extremely rare, extremely local.

HABITAT : Roadside sedge patches.

SEASON : July.

FOODPLANTS : Probably sedges.

REMARKS : This species is larger and a more powerful flier than other Skippers with which it occurs. Prior to 1980 it was not known to occur closer to Ottawa than the Kingston area; it has been collected twice by RAL at a location near Winchester, where it flies with the Mulberry Wing and the Broad Winged Skipper.

TWO SPOTTED SKIPPER *Euphyes bimacula* (Grote & Robinson) K32:2, 36:9

ABUNDANCE : Rare, extremely local.

HABITAT : Sedge areas.

SEASON : Late June to mid-July.

FOODPLANTS : Presumably sedges.

REMARKS : This large Skipper is very wary and difficult to approach. It sometimes ventures away from sedge patches to feed on nearby flowers. This species was unknown in the District until 1979 when RAL found a colony near Quyon. There are now nine colonies known in the District. It could be confused with the Cross Line Skipper. (See remarks under that species and Figures 7, 9 and 10.)

DUN SKIPPER *Euphyes ruricola metacomet* (Harris) K32:3,4, 36:8

ABUNDANCE : Common.

HABITAT : Fields and meadows.

SEASON : Late June to mid-August.

FOODPLANTS : Grasses.

REMARKS : This small, dark Skipper is usually seen on flowers but sometimes alights at damp spots on bare ground. Females (Figure 8) are difficult to distinguish from those of the Northern Broken Dash. Other than by genitalic dissection, the best identification is by association with the clearly distinct males.

PEPPER AND SALT SKIPPER *Amblyscirtes hegon* (Scudder) K37:3

ABUNDANCE : Rare.

HABITAT : Clearings and wood margins.

SEASON : Late May and June.

FOODPLANTS : Grasses.

REMARKS : This very small, dark Skipper can most easily be found by checking Honeysuckle and Lilac blossoms near deciduous woodlands, for example, in the Gatineau hills. Its underside is a slightly greenish-gray as compared to the slightly purplish tint of the Roadside Skipper.

ROADSIDE SKIPPER *Amblyscirtes vialis* (Edwards) K35:13, 37:1

ABUNDANCE : Rare and local.

HABITAT : Woodland clearings and roadsides.

SEASON : Late May to mid-June.

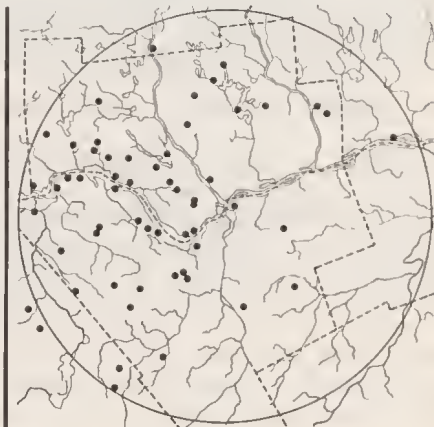
FOODPLANTS : Grasses.

REMARKS : At some localities this species flies together with the Salt and Pepper Skipper. Both are very small and have very rapid flight which makes them easy to overlook and very difficult to catch.



Silver Spotted Skipper ●

*Grizzled Skipper ▲



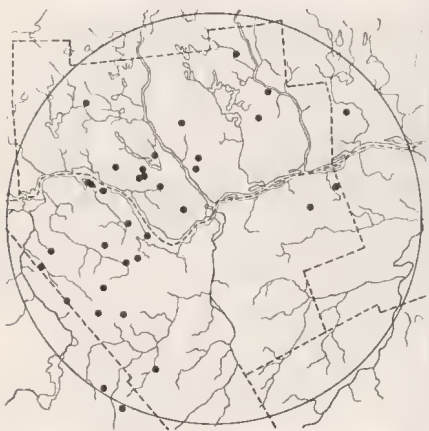
Northern Cloudy Wing



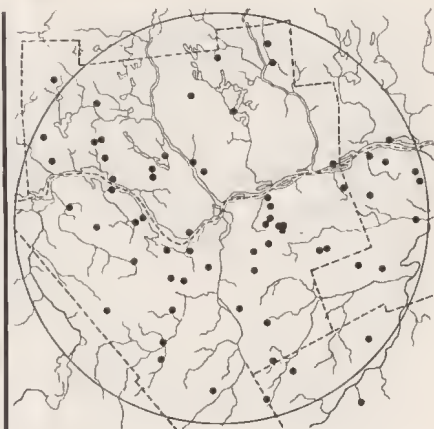
Dreamy Dusky Wing • Common Sooty Wing ▲



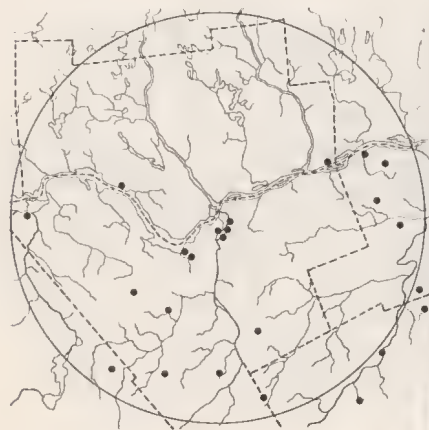
Juvenal's Dusky Wing



Columbine Dusky Wing • Mottled Dusky Wing ▲



Arctic Skipper



Least Skipper



European Skipper



Leonardus Skipper



Indian Skipper



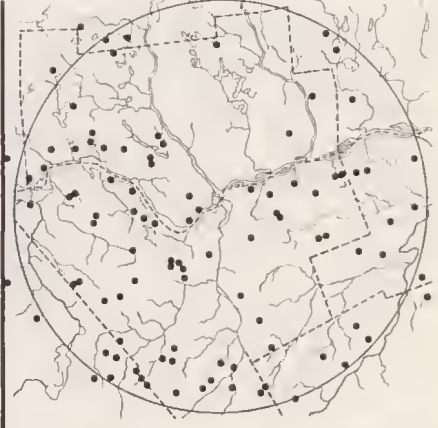
Peck's Skipper



Tawny Edged Skipper



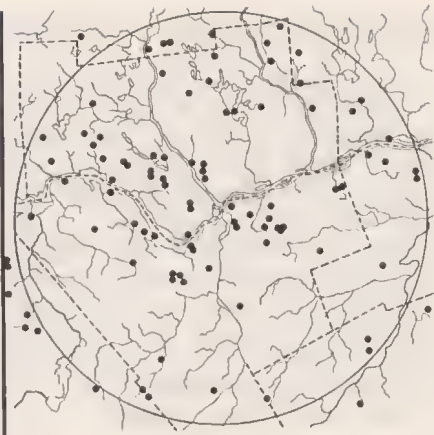
Cross Line Skipper



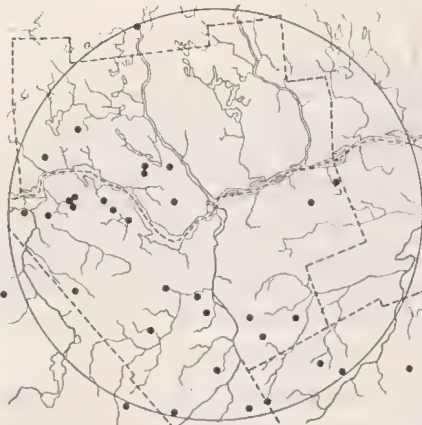
Long Dash



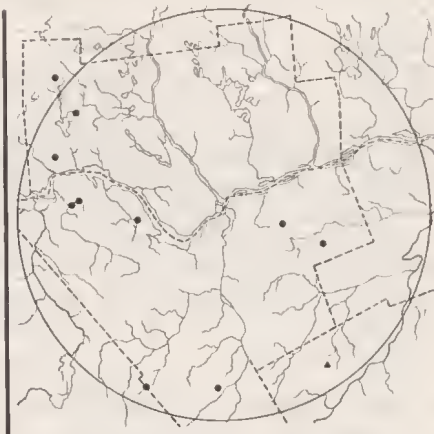
Northern Broken Dash • *Little Glassy Wing ▲



Hobomok Skipper



Broad Winged Skipper



Two Spotted Skipper • Dion Skipper ▲



Dun Skipper • Mulberry Wing ▲



Roadside Skipper • Pepper and Salt Skipper ▲

Although this is one of the smaller butterfly families, it is probably the best known. Swallowtails are large, conspicuous and brightly coloured, most with one or more tails on the hindwings. Many are distasteful to predators and have warning colours in the larval and adult stages, although this is not the case with our two species. The ova are spherical in shape and smooth, quite unlike the ornamented eggs of other families. The larvae are never spiny or hairy but may have fleshy protuberances. All have an osmeterium, a brightly-coloured, forked 'horn' which can be protruded from the thorax just behind the head, giving off a repellent odour when the larvae are disturbed. The pupa is suspended by the cremaster, at the caudal end, and by a silken girdle as well.

BLACK SWALLOWTAIL *Papilio polyxenes asterius* Stoll

K24:2

ABUNDANCE : Locally uncommon.

HABITAT : Weedy fields and waste places.

SEASON : Late May to mid-June, mid-July to late September.

FOODPLANTS : Wild Parsnip (*Pastinaca sativa*), Queen Anne's-lace (*Daucus carota*), Garden Carrot and Dill.

REMARKS : This species is a fast-flying, dark butterfly which moves very swiftly from flower to flower with quickly-vibrating wings, rarely giving opportunities to observe it closely. It is seen in numbers only where foodplants in the wild are abundant. Females have much reduced yellow spots and increased blue markings. The species tends to be more common in the second generation than the first.

TIGER SWALLOWTAIL *Papilio glaucus canadensis* Rothschild & Jordan

K20:3

ABUNDANCE : Common.

HABITAT : Open areas in or near woodland.

SEASON : Mid-May to early July.

FOODPLANTS : Reared locally on Willow (*Salix* spp.), Cherry (*Prunus* spp.), Balsam Poplar (*Populus balsamifera*) and White Ash (*Fraxinus americana*).

REMARKS : The Tiger Swallowtail is a common, showy species, best observed at flowering shrubs, particularly Lilac and Honeysuckle, in areas adjacent to woodlands. It often gathers in large numbers on damp sandy beaches or on dirt roads around mud puddles. A striking example of a semi-melanic Tiger Swallowtail was taken near Meach Lake in 1976 by RAL. *Papilio glaucus glaucus*, a larger, double-brooded subspecies, occurs to the south and has been recorded from the Prescott area.



Black Swallowtail



Tiger Swallowtail

FAMILY PIERIDAE

Whites and Sulphurs

Except for one pale orange species, all of the eight species of this family which have been taken locally are medium-size, white or yellow butterflies, which cannot be mistaken for species of any other family. Most are sexually dimorphic, the females looking quite different from the males. In three species, the females are themselves dimorphic, with two different colour forms. All are avid flower visitors, and none of them flies extremely powerfully.

Their larval foodplants are usually in the Mustard family (*Cruciferae*) or the Clover family (*Fabaceae*). The ova are long and spindle-shaped, with many fine longitudinal ridges. They are laid upright on the foodplant, usually singly. The larvae are usually smooth and green, conforming very closely to the colour of the leaves. The pupae, which are very slim and angular in appearance, are suspended by both the cremaster and a silken girdle.

CHECKERED WHITE *Pontia protodice* (Boisduval & LeConte) K25:8,9

ABUNDANCE : Extremely rare, possibly not resident.

HABITAT : Open dry areas.

SEASON : June to August.

FOODPLANTS : Mustard family (*Cruciferae*).

REMARKS : There is a specimen in the Canadian National Collection, labelled 'Ottawa, Ont.' taken by J. Fletcher on 21 September 1901, another from Norway Bay, just outside the area, taken by G.A. Hobbs on 22 August 1938, and three specimens from Pembroke taken on 30 July 1965. Several others were taken a few years ago by P. Ward near Luskville, but these are not in the Canadian National Collection.

MUSTARD WHITE *Artogeia napi oleracea* (Harris)

K25:4

ABUNDANCE : Common.

HABITAT : Moist deciduous woods and thickets.

SEASON : Early May to mid-September.

FOODPLANTS : Toothworts (*Dentaria* spp.), Tower Mustard (*Arabis glabra*); recorded elsewhere on many other *Cruciferae*.

REMARKS : This familiar woodland butterfly has two or possibly three overlapping generations. First generation specimens have prominent, dark-lined veins beneath; summer specimens are almost completely unmarked white. Despite suggestions that this species may be suffering from competition with the European Cabbage Butterfly, it is still common and widespread in the District.

EUROPEAN CABBAGE BUTTERFLY *Artogeia rapae* (Linnaeus)

K25:10

ABUNDANCE : Common to abundant.

HABITAT : Everywhere except deep woods.

SEASON : Mid-April to October.

FOODPLANTS : A variety of wild and cultivated *Cruciferae*, especially Cabbage and Broccoli.

REMARKS : Introduced into North America about 1860, it is now a pest on cultivated *Cruciferae* over most of the continent. It is the common White of city backyards and gardens and has several overlapping generations, gradually building up in abundance until the fall.

OLYMPIA *Euchloe olympia rosa* (Edwards)

K25:6

ABUNDANCE : Locally rare to uncommon, increasing.

HABITAT : Dry, barren, open areas.

SEASON : Early May to early June.

FOODPLANTS : Locally found only on Tower Mustard (*Arabis glabra*); other *Arabis* species have been recorded elsewhere.

REMARKS : This species is expanding its range into eastern Ontario; it first arrived in the Ottawa District in the early 1970s. To date seven colonies have been located. It can easily be found on the Gatineau Escarpment above Luskville Falls, and can usually be distinguished on the wing from other Whites by its smaller size.

COMMON SULPHUR *Colias philodice* Godart

K23:4,5

ABUNDANCE : Uncommon in spring, abundant later.

HABITAT : Open areas.

SEASON : Late May to late October.

FOODPLANTS : Clovers (*Trifolium* spp.)

REMARKS : This is the common yellow butterfly of the city and waste areas. In late summer and fall it commonly gathers in large numbers at mud puddles. This and the following two species are sexually dimorphic; the white form of the female is more common in the fall.

ALFALFA BUTTERFLY *Colias eurytheme* Boisduval

K23:1,2,3

ABUNDANCE : Rare in June, uncommon later.

HABITAT : Old fields and agricultural areas.

SEASON : June, August to mid-October.

FOODPLANTS : Reported to prefer Alfalfa (*Medicago sativa*) over other species of the Clover family.

REMARKS : The abundance of this species varies greatly from year to year. Specimens with orange only in the centre of the wings are possibly hybrids with the Common Sulphur. (See Klots for more details.)

PINK EDGED SULPHUR *Colias interior* Scudder

K23:6,7

ABUNDANCE : Uncommon, local.

HABITAT : Blueberry bogs and blueberry barrens.

SEASON : Mid-June to mid-July.

FOODPLANTS : Blueberry (*Vaccinium* spp.)

REMARKS : The Pink Edged Sulphur can be found anywhere that Blueberries are abundant. There is a white female form, but it is quite rare. A bilateral gynandromorph, in which the left side is a normal yellow male and the right side is a white female, was collected by RAL in 1978 above the Luskville Falls.

LITTLE SULPHUR *Eurema lisa* Boisduval & LeConte

K22:1,2

ABUNDANCE : Extremely rare.

HABITAT : Open fields and roadsides.

SEASON : Mid-June to September.

FOODPLANTS : Species in the Clover family.

REMARKS : This southern species migrates north each year and very occasionally reaches the Ottawa District. The last occurrences were in 1968 and 1981 (a single specimen taken by Ian Jones near Constance Lake), although the hoped-for second generation did not occur in 1981. The Canadian National Collection has specimens from Ottawa, taken 15 October 1900 by A. Gibson, others from Arnprior, taken on 1 July 1968 by JDL, and a single specimen collected at Perth Road, south of the District, on 26 July 1970.



Mustard White



European Cabbage Butterfly

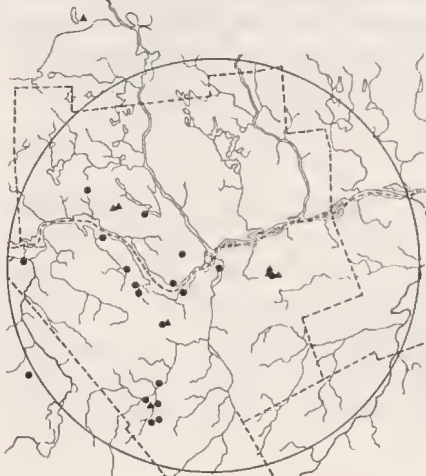


Olympia •

Little Sulphur ■
Checkered White ▲

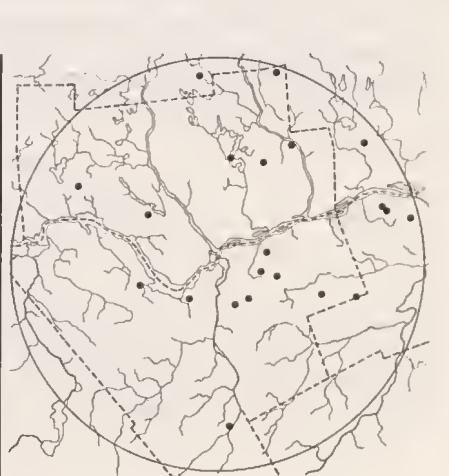


Common Sulphur



Alfalfa Butterfly •

Pink Edged Sulphur ▲



Harvester

FAMILY LYCAENIDAE Gossamer-winged Butterflies

This is one of the largest families of butterflies in the world. All are small or very small, usually with some areas of bright, metallic colours on the wings. Many species have fine, hairlike tails on the hindwings. Many have the odd habit of rubbing their hindwings together when they are folded above the back.

Their ova are flattened spheres, with a definite hollow in the upper surface and covered all over with fine sculpturing. The larvae are very distinctive. They are never cylindrical like other caterpillars but are short and wide, shaped somewhat like sowbugs. Most feed on buds, flowers or immature leaves, rather than on mature foliage. Some are regularly attended by ants, which care for the larvae in exchange for a secreted 'honeydew'. The pupae are very short and rounded, often covered with very fine bristles. They are never suspended but instead are bound to the substrate with silk. While many species overwinter as pupae or larvae, most of our Hairstreaks hibernate as ova, which are laid on twigs or on overwintering buds so as to avoid being shed with the leaves in the fall.

The family includes the familiar Blues and Coppers, and the Hairstreaks and Elfins. The Ottawa District has 19 resident species; one other has been taken just outside the District and is almost certain to occur inside as well.

HARVESTER *Feniseca tarquinius* (Fabricius)

K18:8

ABUNDANCE : Uncommon, local.

HABITAT : Alder thickets.

SEASON : Late May to early June, early July to early September.

FOOD : Woolly Aphids (*Schizoneura* and *Pemphigus* spp.) on Speckled Alder (*Alnus rugosa*).

REMARKS : The Harvester has a unique life history. The larvae are totally carnivorous, feeding on Woolly Aphids on Alder shrubs. The adults are rarely seen away from the immediate vicinity of the Alders. They rarely visit flowers but usually perch on leaves of Alders or other nearby trees. Their flight is extremely fast and erratic. (The distribution map for this species is on the opposite page.)

AMERICAN COPPER *Lycaena phlaeas americana* Morris

K21:2

ABUNDANCE : Uncommon, local.

HABITAT : Dry, barren areas where its foodplant occurs.

SEASON : Early June to late September; at least two broods.

FOODPLANTS : Sheep Sorrel (*Rumex acetosella*).

REMARKS : This Copper may be found anywhere where its foodplant occurs but is often absent in areas that appear to be completely suitable. It is the only local Copper that is a truly metallic copper colour.

BRONZE COPPER *Hyllolycaena hyllus* (Cramer)

K21:1

ABUNDANCE : Uncommon.

HABITAT : Damp fields, roadside ditches.

SEASON : Mid-June to mid-September; two broods.

FOODPLANTS : Docks (*Rumex* spp.) and Knotweeds (*Polygonum* spp.).

Reared locally on Curled Dock (*Rumex crispus*).

REMARKS : This is the largest and most widespread Copper in the District, usually encountered on flowers along wet ditches. The two sexes differ in forewing pattern; the female has a large, dark-spotted, pale-orange area on the forewing.

BOG COPPER *Epidemia epixanthe michiganensis* (Rawson)

K21:4

ABUNDANCE : Common but local.

HABITAT : Bogs and fens.

SEASON : Mid-June to mid-July.

FOODPLANTS : Large Cranberry (*Vaccinium macrocarpon*), possibly also Small Cranberry (*V. oxycoccos*).

REMARKS : This Copper can be readily recognised by the purplish sheen on the forewings, its small size and its weak flight. It is common in the Mer Bleue.

CORAL HAIRSTREAK *Harkenclenus titus* (Fabricius)

K16:6

ABUNDANCE : Uncommon.

HABITAT : Open areas and roadsides.

SEASON : Early July to early August.

FOODPLANTS : Reported to feed on Plum and Cherry (*Prunus* spp.).

REMARKS : The Coral Hairstreak is our only tailless Hairstreak. Its row of orange spots on the hindwing is unique. Like other Hairstreaks it is most often found on flowers of Milkweed near its foodplants. It is sometimes common on Butterfly-weed at The Sand Hills at Constance Bay.

ACADIAN HAIRSTREAK *Satyrrium acadica watrini* (Dufrane)

K16:7

ABUNDANCE : Common.

HABITAT : Damp shrubby meadows and roadsides.

SEASON : Late June to early August.

FOODPLANTS : Willows (*Salix* spp.). Reared locally on Slender Willow (*Salix petiolaris*).

REMARKS : Like most other Hairstreaks, it is commonly found on flowers, especially of Milkweed and Sweet White Clover, in areas where its foodplants occur. It is usually the only Hairstreak in these areas. It is easily distinguished from all other local species by the small, round, black spots on the underside.

EDWARDS' HAIRSTREAK *Satyrrium edwardsii* (Grote & Robinson) K16:11

ABUNDANCE : Extremely rare.

HABITAT : Clearings in woods, near Oaks.

SEASON : July.

FOODPLANTS : Oaks (*Quercus* spp.).

REMARKS : This species was taken in the Britannia area about 15 years ago; the only recent record is from Braeside, just west of the District, where it was collected in 1981 by Ian Jones. It should be looked for among other Hairstreaks on Milkweed flowers. It is very similar in appearance to the Banded Hairstreak. Figures 11 and 12 show typical specimens of both species, and the best distinguishing characteristics. In addition, the Edwards' Hairstreak has more brown shading beneath.

BANDED HAIRSTREAK *Satyrrium calanus falacer* (Godart) K16:10

ABUNDANCE : Common and local.

HABITAT : Dry wood margins and clearings.

SEASON : Late June to early August.

FOODPLANTS : Locally reared on Butternut (*Juglans cinerea*) and Bur Oak (*Quercus macrocarpa*).

REMARKS : This is the commonest Hairstreak in the Ottawa District. It can be found in numbers on flowers of Milkweed and Sweet White Clover near the larval foodplants. It also likes to perch on leaves in the sunlight. Figure 12 shows a typical local specimen, but there is a great deal of variation, which greatly complicates the identification of several species. *Satyrrium boreale*, described by JDL in *Trail & Landscape* 3(5): 151, 1969, from specimens collected at Britannia, is now believed to be a form of the Banded Hairstreak.

HICKORY HAIRSTREAK *Satyrrium caryaevorus* (McDunnough) K16:12

ABUNDANCE : Rare to uncommon, and extremely local.

HABITAT : Dry wood margins and clearings.

SEASON : Late June to mid-July.

FOODPLANTS : Reared locally on Bitternut Hickory (*Carya cordiformis*), Butternut (*Juglans cinerea*), Red Oak (*Quercus rubra*) and White Ash (*Fraxinus americana*).

REMARKS : This species is extremely variable in abundance from year to year but is never common. It can be very difficult to distinguish it from the Banded Hairstreak with which it usually flies. Figures 12 and 13 show typical specimens of each species, but both have so much individual variation that many identifications must be checked by genitalic dissection.

STRIPED HAIRSTREAK *Satyrrium liparops strigosa* (Harris) K16:8

ABUNDANCE : Uncommon and local.

HABITAT : Dry wood margins and clearings.

SEASON : July.

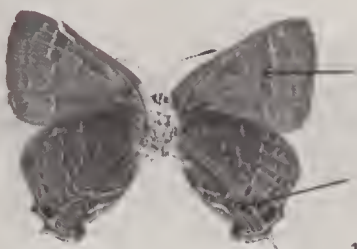
FOODPLANTS : Recorded on a variety of plants, including Oaks



11



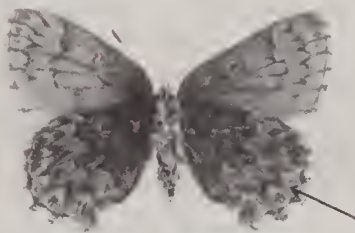
12



13



14



15



16

Figures 11 - 16 Hairstreaks and Elfins, underside, X1½

- 11. *Edwards' Hairstreak*
- 13. *Hickory Hairstreak*
- 15. *Western Pine Elfin*

- 12. *Banded Hairstreak*
- 14. *Pine Elfin*
- 16. *Bog Elfin*

(*Quercus* spp.), Cherry and Plum (*Prunus* spp.) and Blueberry (*Vaccinium* spp.); never reared locally.

REMARKS : The Striped Hairstreak is never seen in large numbers. It is most commonly found in brushy areas where Cherry bushes are common, and less often on flowers in association with the Banded Hairstreak. The presence of an orange cap above the blue patch on the hindwing underside allows this species to be easily distinguished from other similar species.

BROWN ELFIN *Incisalia augustinus* (Westwood)

K16:15

ABUNDANCE : Locally common.

HABITAT : Blueberry bogs and barrens.

SEASON : Early May to mid-June.

FOODPLANTS : Blueberry (*Vaccinium* spp.) and Sheep Laurel (*Kalmia angustifolia*).

REMARKS : The Brown Elfin is very local, but in the Mer Bleue and in The Sand Hills at Constance Bay it is often abundant and outnumbers all the other Elfin species.

HOARY ELFIN *Incisalia polios* (Cook & Watson)

K16:16

ABUNDANCE : Rare to uncommon, extremely local

HABITAT : Extremely dry, rocky or sandy areas.

SEASON : May.

FOODPLANTS : Bearberry (*Arctostaphylos uva-ursi*).

REMARKS : This Elfin is restricted to the immediate vicinity of the foodplant. RAL found several colonies in 1981 by visiting previously-located stands of Bearberry. The Hoary Elfin is most easily found in The Sand Hills at Constance Bay.

HENRY'S ELFIN *Incisalia henrici* (Grote & Robinson)

K16:17

ABUNDANCE : Uncommon and extremely local.

HABITAT : Wood edges and clearings and shrubby areas.

SEASON : May.

FOODPLANTS : Blueberry (*Vaccinium* spp.) and Plum (*Prunus* spp.).

REMARKS : There are relatively few colonies of this species known in the Ottawa District despite its wide range of habitat preference. It is considered rare throughout its range. Within the District it is most easily found in The Sand Hills at Constance Bay.

PINE ELFIN *Incisalia nippon clarki* (Freeman)

K16:19

ABUNDANCE : Occasionally common, usually uncommon.

HABITAT : Open Pine woods.

SEASON : May.

FOODPLANTS : The literature reports only hard Pines, for example, Jack Pine (*Pinus banksiana*), but it has been found and reared locally only on a soft Pine, White Pine (*Pinus strobus*).

REMARKS : This species is typically found along sandy roads and trails in Pine woods where it often alights on the ground or on

the trees. The subspecies *clarki*, found over the entire Canadian range of the species, was described from The Sand Hills at Constance Bay. Specimens taken in the northern part of the District should be checked carefully against Figures 14 and 15. (See Western Pine Elfin under 'Possible Species'.)

GRAY HAIRSTREAK *Strymon melinus humuli* (Harris)

K16:1

ABUNDANCE : Extremely rare.

HABITAT : Open areas.

SEASON : Double-brooded, May, and July, at least locally.

FOODPLANTS : A wide variety of plants in other parts of its range; unknown locally.

REMARKS : Recorded only once in the District, by JDL, a straggler collected in Ottawa West in 1964, it is probably resident in the Kazabazua Sandhills near Danford Lake, just north of the District, where it has been recorded twice at widely separated locations in two different years. It is the most common Hairstreak further south, where it is occasionally a pest on legumes. At the northern extremes of its range it is rare and usually found in hot sandy habitats.

EARLY HAIRSTREAK *Erora laeta* (Edwards)

K16:14

ABUNDANCE : Rare.

HABITAT : Beech-Maple woods.

SEASON : Mid-May to early June.

FOODPLANTS : Beech (*Fagus grandifolia*) and Beaked Hazelnut (*Corylus cornuta*) have been suggested in the literature, but there is still much doubt about the actual foodplant.

REMARKS : Little is known about the life history of this elusive butterfly. The adults are to be looked for on or near wooded roads in the Gatineau Hills where they often alight in sunny spots on the road and can usually be approached very closely. This species has been recorded in each of the last four years in the Ottawa District, but there are few records before that. It is very unusual in that the female has much more bright blue on the upper surface than the male. A second generation has recently been reported in other areas of similar latitude, so the same could be true in the District as well. Locations where the species is found in the spring should be checked in July, particularly where Milkweeds, a favourite Hairstreak nectar source, are found.

EASTERN TAILED BLUE *Everes comyntas* (Godart)

K19:4, 21:5

ABUNDANCE : Extremely rare.

HABITAT : Roadsides and fields in or near wooded areas.

SEASON : At least mid-June to mid-August.

FOODPLANTS : Clovers (*Trifolium* spp.).

REMARKS : There are very few records from the Ottawa District; these include specimens taken in the mid-1960s near Aylmer, and in 1981 near Danford Lake (in June) and near Rockland (in August).

It is likely that it is double-brooded here as the June specimen was worn, and the August specimens were fresh. The scarcity of this small Blue is puzzling as it is often one of the most common species throughout its wide North American range. It is common at least as far north as Brockville.

SPRING AZURE *Celastrina ladon* (Cramer)

K18:5,21:6,7

ABUNDANCE : Common.

HABITAT : Roadsides and trails in open woods and shrubby areas.

SEASON : Two broods, mid-April to early June, late June to mid-August.

FOODPLANTS : A wide variety of shrubs, locally reared on Nannyberry (*Viburnum lentago*) and Choke Cherry (*Prunus virginiana*).

REMARKS : This is one of the earliest butterflies to emerge from its pupa in the spring, often flying before the last patches of snow have melted. The larvae usually feed on the flowers of the foodplant. The butterfly tends to be most common near Meadowsweet (*Spiraea* spp.) as this is one of the few common local shrubs to flower late enough for the larvae of the second generation. It is a highly variable species in colouration both between and within the two broods.

SILVERY BLUE *Glaucopsyche lygdamus couperi* Grote

K21:9

ABUNDANCE : Abundant.

HABITAT : Fields and roadsides.

SEASON : Mid-May to early July.

FOODPLANTS : Locally reared on Sweet White Clover (*Melilotus alba*), Cow Vetch (*Vicia cracca*) and Alfalfa (*Medicago sativa*).

REMARKS : This species is the commonest Blue found in the Ottawa District and the commonest Lycaenid. It is often found at flowers along roadsides and even in open areas in the city. The larvae of this species usually eat the flowers of the foodplants and can be green, white or pink depending on their diet.

*SAEPIOLUS BLUE *Plebejus saepiolus amica* (Edwards)

K21:8

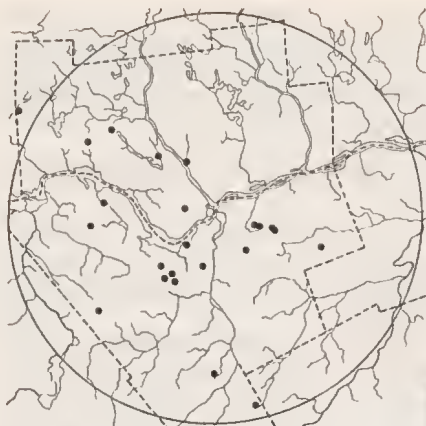
ABUNDANCE : Rare.

HABITAT : Dry, sandy areas.

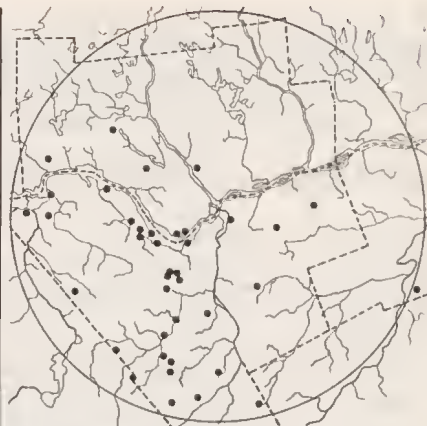
SEASON : June.

FOODPLANTS : Clovers (*Trifolium* spp.).

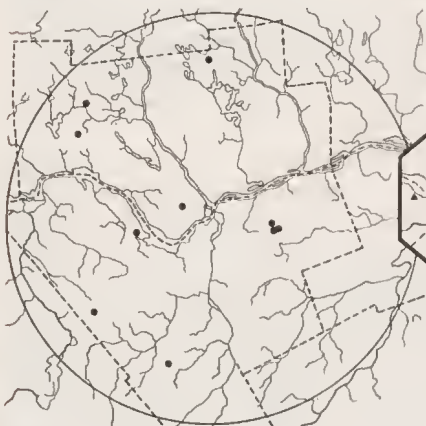
REMARKS : This species was recorded from several sites in the Kazabazua Sandhills, just north of the District, during a study of insects on Sweetfern, a plant characteristic of extremely dry, sandy areas. It will probably be found in the northern part of the District when suitable habitat has been checked.



American Copper



Bronze Copper



Bog Copper •



Coral Hairstreak •

Edwards' Hairstreak ▲

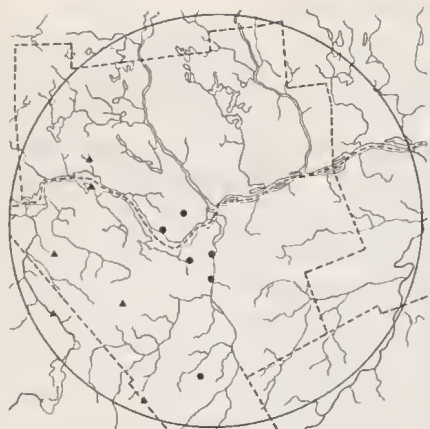


Acadian Hairstreak

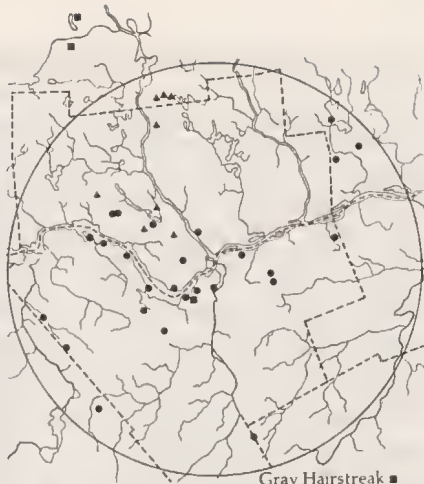


Banded Hairstreak

Normal form •
Form borealis ▲
Both forms ■



Hickory Hairstreak •



Hoary Elfin ▲

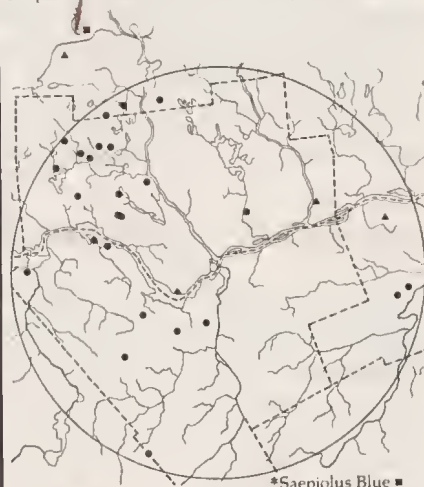
Striped Hairstreak •

Gray Hairstreak ■
Early Hairstreak ▲



Brown Elfin •

Henry's Elfin ▲

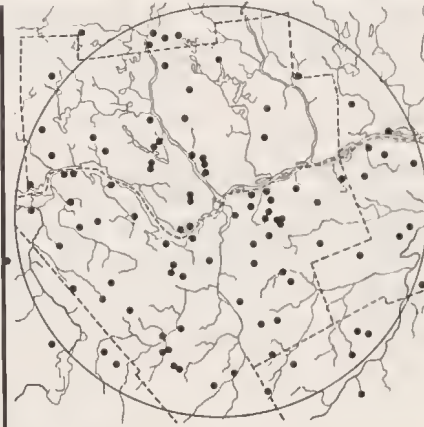


Pine Elfin •

*Saepiolus Blue ■
Eastern Tailed Blue ▲



Spring Azure •



Silvery Blue

Family NYMPHALIDAE Brush-footed Butterflies

All members of this family, as well as the following two families, have greatly reduced front legs. They appear, even under close examination, to have only four legs. In the *Nymphalidae*, the reduced front legs are covered with long hair, hence the common family name. This is another very large family, but one about which it is very hard to generalize. Even our 28 local species vary greatly. They range in size from small to large, with a wide variety of wing patterns, though most are orange-brown in colour. Many have an irregular wing outline and a beautiful camouflage pattern on the underside, so that they closely resemble dead leaves when their wings are closed.

Their ova are usually barrel-shaped, with vertical ribs or ridges, in some cases with smaller horizontal ridges between them. In some species they are laid in large masses of up to 500 eggs, either on leaves or twigs. The larvae are almost always spiny and usually brightly coloured. The pupae, which are suspended only by the cremaster, are in most cases very irregularly shaped, which with their dull colours makes them very difficult to detect. Some species overwinter as adults and are always the first butterflies to be seen in the spring when they emerge from their hibernation.

QUESTION MARK *Polygonia interrogationis* (Fabricius) K14:4, 17:5,6

ABUNDANCE : Usually uncommon, but variable.

HABITAT : Old fields, wood margins.

SEASON : Early June to mid-September.

FOODPLANTS : Reared locally on Stinging Nettle (*Urtica dioica*) and White Elm (*Ulmus americana*).

REMARKS : Unlike the other Angle Wings (genus *Polygonia*), the Question Mark does not appear to overwinter in the District but probably migrates here in June. It is the only Angle Wing commonly encountered in the city, particularly in late summer when locally emerging specimens are numerous. It is the only Angle Wing which has its silvery mark on the hindwing beneath separated into two parts (Figure 17).

COMMA *Polygonia comma* (Harris)

K14:1, 17:1

ABUNDANCE : Uncommon.

HABITAT : Wood margins.

SEASON : Early April to mid-September.

FOODPLANTS : Reared locally on Stinging Nettle (*Urtica dioica*) and Wood Nettle (*Laportea canadensis*).

REMARKS : This is always one of the first butterflies to be seen each year. There are two generations, one flying in late June and July, the other flying for a short time in September and again in April, May and early June. The mid-summer form is usually very blotchy beneath (Figure 20), whereas the other generation tends to be more evenly coloured. The larvae live singly

in very distinctive leaf-nests which are always made in an unusual triangular cross-section.

SATYR ANGLE WING *Polygonia satyrus* (Edwards)

K17:4

ABUNDANCE : Rare.

HABITAT : Woodland trails and margins.

SEASON : Local records from May to July only; it probably flies until at least September.

FOODPLANTS : Reported to feed on Stinging Nettle (*Urtica dioica*).

REMARKS : Although most local records are of overwintered specimens caught in May, Jack Holliday caught a freshly-emerged specimen near MacGregor Lake on 10 July 1981. The Angle Wings are all difficult to identify on the wing, but the Satyr Angle Wing tends to be more yellowish-brown than the others. It is very similar to the much more common Comma, from which it can be distinguished, in addition to the features pointed out in Figures 19 and 20, by the shape of the dark streaks near the leading edge of the forewing underside. In the Satyr Angle Wing, they are elongate and parallel-sided, but in the Comma they are shorter and more oval in shape.

GREEN COMMA *Polygonia faunus* (Edwards)

K14:2

ABUNDANCE : Uncommon, local.

HABITAT : Spruce and Balsam Fir woodlands.

SEASON : April to September.

FOODPLANTS : Reared locally on Willow (*Salix* spp.).

REMARKS : This species can be recognized in its various forms by the green spots (see Figure 18) along the wing margins on the underside, which tend to be very vivid in fresh specimens but very faded in overwintered ones.

GRAY COMMA *Polygonia progne* (Cramer)

K14:3, 17:3

ABUNDANCE : Uncommon.

HABITAT : Wood margins.

SEASON : Mid-April to early October.

FOODPLANTS : Reported from Currant (*Ribes* spp.) and Elm (*Ulmus* spp.). These should be checked locally as they seem questionable.

REMARKS : This is another two-brooded species, with a short-lived brood flying from late June to early August, and a second generation flying from late August until the winter, then again in April and May. It is our only species in which the silvery comma on the underside lacks a 'barb' on each end (Figure 21).

COMPTON TORTOISE SHELL *Nymphalis vau-album j-album*

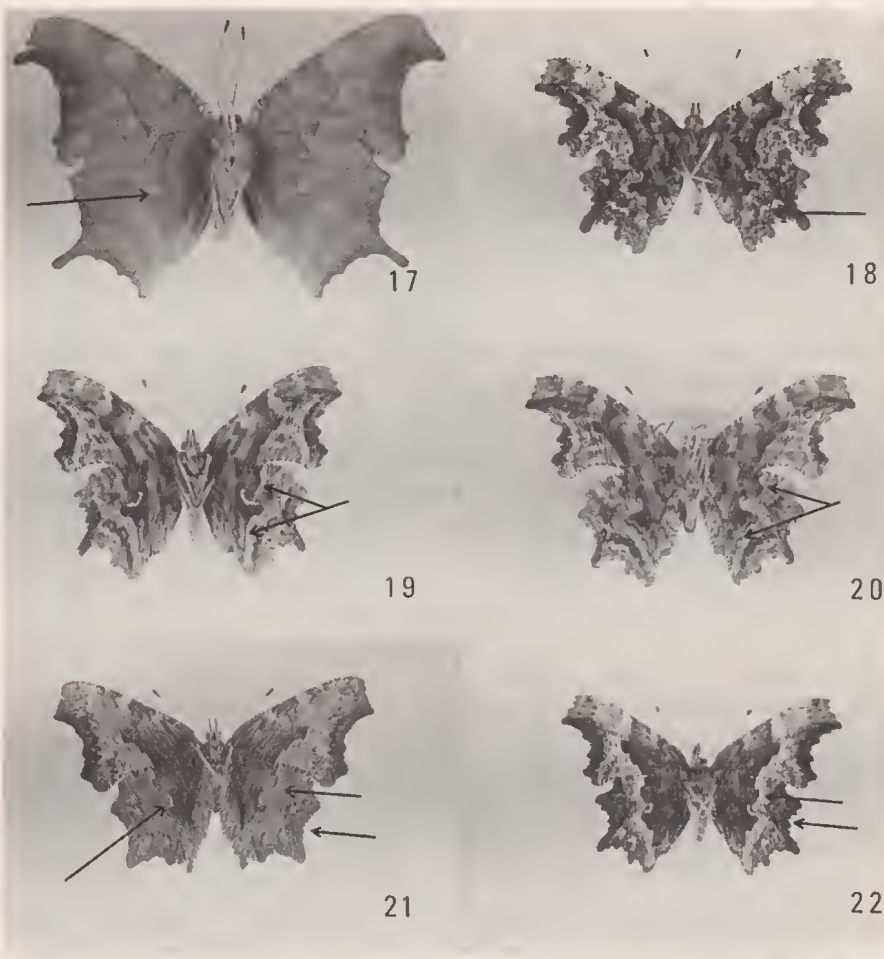
(Boisduval & LeConte) K11:7, 14:6

ABUNDANCE : Rare to uncommon.

HABITAT : Precambrian Shield forests.

SEASON : Early April to late September.

FOODPLANTS : Reported from Birch (*Betula* spp.) and Willows



Figures 17 - 22 Angle Wings, underside, X4/5

- 17. Question Mark
- 19. Satyr Angle Wing
- 21. Gray Comma

- 18. Green Comma
- 20. Comma
- 22. Hoary Comma

(*Salix* spp.).

REMARKS : Most frequently reported by cottagers in the Gatineau Hills, this species has the longest lifespan as an adult of any of our butterflies. They emerge in late June, fly until the fall, hibernate and then fly again until mid-May. The Compton Tortoise Shell is reported to lay its ova in large masses, and to have gregarious larvae like the Mourning Cloak, but neither the ova or larvae have been found in the District.

MOURNING CLOAK *Nymphalis antiopa* (Linnaeus)

K11:8, 14:8

ABUNDANCE : Common, somewhat variable.

HABITAT : Open woodlands.

SEASON : April to October.

FOODPLANTS : Reared locally on Willow (*Salix* spp.), Meadowsweet (*Spiraea latifolia*), Poplar (*Populus* spp.), Elm (*Ulmus americana*) and Hackberry (*Celtis occidentalis*).

REMARKS : One of the most familiar butterflies in woodlands in the spring, it is also seen commonly in the city. It is often seen patrolling damp areas along dirt roads, usually singly. This species is two-brooded but there is at least a small overlapping of generations so that it may be seen at any time during its flight season. Its black and red, gregarious larvae are commonly seen on willow (Klots 5:12).

MILBERT'S TORTOISE SHELL *Aglais milberti* (Godart)

K14:7

ABUNDANCE : Uncommon, locally common.

HABITAT : Clearings and old fields near woods.

SEASON : Mid-April to early October.

FOODPLANTS : Reared locally on Stinging Nettles (*Urtica dioica* and *Urtica gracilis*).

REMARKS : This species has at least three overlapping generations. It lays its ova in large masses of several hundred on the leaves of the foodplant. The larvae are highly colonial, often completely stripping large patches of Stinging Nettles. They are often very heavily parasitised, which greatly reduces the numbers emerging in the fall.

AMERICAN PAINTED LADY *Vanessa virginiensis* (Drury)

K14:11

ABUNDANCE : Absent to common, most years uncommon.

HABITAT : Old dry fields.

SEASON : Mid-May to late September.

FOODPLANTS : Reared locally on Pearly Everlasting (*Anaphalis margaritacea*).

REMARKS : This migrant butterfly moves north into our area in most years. It is usually seen on flowers along roadsides and in old fields. On the wing, it can be distinguished from the Painted Lady by its orange-brown, rather than pinkish-brown colour, and by the blue center of the eyespots on the upper side of the hindwings.

PAINTED LADY *Vanessa cardui* (Linnaeus)

K14:10

ABUNDANCE : Absent to uncommon, usually rare.

HABITAT : Waste places and fields.

SEASON : Early June to mid-September.

FOODPLANTS : Reared locally on Canada Thistle (*Cirsium arvense*) and Bull Thistle (*C. vulgare*).

REMARKS : This species is one of the best-known migrant butterflies but occurs in the Ottawa District less often and less commonly than the American Painted Lady. It has been recorded in only six of the last twelve years, but only in 1979 was it common enough to be seen regularly.

RED ADMIRAL *Vanessa atalanta rubria* (Fruhstorfer)

K14:9, 17:2

ABUNDANCE : Rare to common, usually uncommon.

HABITAT : Waste areas, fields and wood margins.

SEASON : Early May to mid-September.

FOODPLANTS : Stinging Nettles (*Urtica gracilis* and *U. dioica*) and, at least in 1981, Wood Nettle (*Laportea canadensis*).

REMARKS : This migrant reaches the District every year in greatly varying numbers and is suspected to overwinter successfully at least some years. It was exceptionally common all over the District in 1981, but numbers began to taper off in August. The larvae are highly variable in colour and live singly in rolled-leaf nests.

BUCKEYE *Junonia coenia* (Hubner)

K14:12

ABUNDANCE : Extremely rare.

HABITAT : Usually sandy waste areas.

SEASON : At least mid-June to late September.

FOODPLANTS : Toadflax (*Linaria vulgaris*), Plantain (*Plantago* spp.) *Gerardia* (*Gerardia purpurea*); not reared locally.

REMARKS : This southern species regularly migrates north into southern Ontario but is only known to have reached the Ottawa area twice. There was a single record in 1966 and a major invasion in 1981. They were found in at least nine separate locations and at least three breeding colonies were established. The colony at South March (*Trail & Landscape* 14(4): 186, 1981) produced two generations; the first appeared in mid-July and the second in September. The population was estimated to be at least 100 individuals in each brood.

VARIEGATED FRITILLARY *Euptoieta claudia* (Cramer)

K11:1

ABUNDANCE : Extremely rare.

HABITAT : Roadsides, open areas.

SEASON : June and July (locally) to September further south.

FOODPLANTS : Violets and Pansies (*Viola* spp.) and other plants.

REMARKS : A male of this migratory southern species was captured two miles south of Danford Lake, just north of the Ottawa District by PWH in June, 1981. This record is possibly a northward range

extension of the species in eastern North America. A second record of the butterfly occurring in the Ottawa District came to light when a previously-overlooked female specimen in the Canadian National Collection was discovered, labelled 'Ottawa, Ont., 6.VII. 53, captured on Milk Vetch by B. Moore'.

GREAT SPANGLED FRITILLARY *Speyeria cybele* (Fabricius)

K8:4

ABUNDANCE : Common.

HABITAT : Fields, wood margins and clearings.

SEASON : Mid-June to early September.

FOODPLANTS : Violets (*Viola* spp.).

REMARKS : This is the largest and by far the commonest of the Greater Fritillaries (genus *Speyeria*). It can be readily recognized by the characteristics cited by Klots, as well as by its larger size. The other two Greater Fritillaries are more easily confused.

APHRODITE *Speyeria aphrodite winni* (Gunder)

K8:6

ABUNDANCE : Uncommon.

HABITAT : Wood margins and clearings.

SEASON : Late June to late August, seldom seen before mid-July.

FOODPLANTS : Violets (*Viola* spp.).

REMARKS : This species can be confused with the Atlantis Fritillary. Both are probably more widespread than the distribution maps would indicate because of the difficulty of identifying them on the wing.

ATLANTIS FRITILLARY *Speyeria atlantis* (Edwards)

K8:8

ABUNDANCE : Uncommon.

HABITAT : Wood margins and clearings.

SEASON : Late June to mid-August.

FOODPLANTS : Violets (*Viola* spp.).

REMARKS : The illustration in Klots does not clearly show the deeper purplish-brown on the underside of the hindwing which is characteristic of *atlantis*, and the dark shading above is usually much darker than shown as well. The Atlantis Fritillary tends to be the least common of the three Greater Fritillaries and is frequently found with the other species, making identification even more difficult.

BOG FRITILLARY *Proclossiana eunomia dawsoni*

(Barnes & McDunnough) K13:6

ABUNDANCE : Rare, extremely local.

HABITAT : Bogs.

SEASON : Mid-June.

FOODPLANTS : Small Cranberry (*Vaccinium oxycoccos*) and Creeping Snowberry (*Gaultheria hispidula*).

REMARKS : The Bog Fritillary was originally known only from the Mer Bleue, but the last specimen was seen there in 1908. It is now known from two bogs in the Quebec part of the District, but only in one has it been found regularly.



23



24



25



26



27



28

Figures 23 - 28 Crescents and a Checkerspot, X1 $\frac{1}{2}$

- | | |
|---|---------------------------------------|
| 23. Tawny Crescent, upperside | 24. Tawny Crescent, underside |
| 25. Pearl Crescent, upperside | 26. Pearl Crescent, underside |
| 27. female Pearl Crescent,
extreme form, upperside | 28. Silvery Checkerspot,
upperside |

SILVER BORDERED FRITILLARY *Clossiana selene astrocalis* (Huard) K13:4

ABUNDANCE : Common.

HABITAT : Damp meadows and marshes.

SEASON : Late May to early September; two broods.

FOODPLANTS : Violets (*Viola* spp.).

REMARKS : The Silver Bordered Fritillary is like a smaller version of the Greater Fritillaries. It can be seen in a variety of wet habitats, even occasionally in bogs.

MEADOW FRITILLARY *Clossiana bellona toddi* (Holland) K13:1

ABUNDANCE : Common.

HABITAT : Fields and roadsides.

SEASON : Mid-May to mid-September; three broods.

FOODPLANTS : Violets (*Viola* spp.).

REMARKS : This species is the most commonly encountered of the small Fritillaries. Its larvae, and probably those of all the other local Fritillaries, feed by night and hide during the day well away from the foodplant.

*FREIJA FRITILLARY *Clossiana freija* (Thunberg) K13:10

ABUNDANCE : Extremely rare, not recorded recently.

HABITAT : Bogs.

SEASON : Mid-May to early June.

FOODPLANTS : Reported to be Blueberries (*Vaccinium* spp.).

REMARKS : There is only one record of this butterfly in the Ottawa District, a specimen taken by C.H. Young in the east end of the Mer Bleue on 11 June 1911. It was placed in the Canadian National Collection but has since disappeared. The exact location where it was taken is now flooded by beaver activity, but the Freija Fritillary might still be found in other remote areas of the bog. The closest other record is from Nominingue, Labelle County, Quebec, about 70 km northeast of the Ottawa District.

PEARL CRESCENT *Phyciodes tharos* (Drury) K13:14

ABUNDANCE : Abundant.

HABITAT : Everywhere except the densest woods.

SEASON : Late May to late September.

FOODPLANTS : Asters (*Aster* spp.).

REMARKS : This is the most abundant of the native butterflies. At first glance they look like very small Fritillaries. The females are extremely variable, some approaching the Checkerspots in appearance. (Compare Figures 27 and 28.) The Pearl Crescent is commonly found in the city. It is abundant in June and early July, and there is a partial second brood overlapping with stragglers of the first brood. This second generation flies in much reduced numbers until September.

TAWNY CRESCENT *Phyciodes batesii* (Reakirt)

K13:12

ABUNDANCE : Uncommon, extremely local.

HABITAT : Dry areas.

SEASON : Late May to early June.

FOODPLANTS : Asters (*Aster* spp.) possibly *A. simplex*.

REMARKS : This species has probably been overlooked because of its similarity to the abundant Pearl Crescent (see Figures 23-26) and its extremely local nature. Its flight season also coincides with the beginning of the peak of the Pearl Crescent's season.

SILVERY CHECKERSPOT *Charidryas nycteis* (Doubleday)

K12:2

ABUNDANCE : Rare to uncommon.

HABITAT : Dry wood margins and clearings.

SEASON : Late June to early July.

FOODPLANTS : Asters (*Aster* spp.)

REMARKS : This species could be confused with a large female Pearl Crescent but can be distinguished by the shape of the spots on the hindwing above (compare Figures 27 and 28) as well as by the more silvery hindwings below. This species is extremely variable in abundance from year to year. It is usually rare but occasionally occurs locally in large numbers for a single year.

HARRIS' CHECKERSPOT *Charidryas harrisii* (Scudder)

K12:1

ABUNDANCE : Common, but extremely local.

HABITAT : Wet meadows.

SEASON : June.

FOODPLANTS : Flat-topped White Aster (*Aster umbellatus*).

REMARKS : Most of the known colonies in the Ottawa District were discovered by finding the larvae whose highly conspicuous webs can be found throughout the summer. The adults, by contrast, can be difficult to find because they have a very short flight season.

BALTIMORE *Euphydryas phaeton* (Drury)

K11:4

ABUNDANCE : Locally common.

HABITAT : Marshy fields and roadside ditches.

SEASON : Mid-June to late July.

FOODPLANTS : Turtlehead (*Chelone glabra*)

REMARKS : This butterfly rarely strays far from Turtlehead, on which the larvae may be found in large colonies during their first year. After hibernation the larvae live singly on a variety of other plants, including locally Red Ash (*Fraxinus pennsylvanica*). Unlike most Nymphalids the adults are slow-flying.

WHITE ADMIRAL *Basilarchia arthemis* (Drury)

K15:2

ABUNDANCE : Uncommon to common.

HABITAT : Roads and trails in wooded areas.

SEASON : Mid-June to mid-August.

FOODPLANTS : Birch (*Betula* spp.), Aspen (*Populus* spp.), locally

reared on Willow (*Salix* spp.).

REMARKS : While most specimens are seen during the first month of the flight season, individuals from a partial second generation can be found well into August. This species varies widely in the amount of red-spotting on the hindwings above.

VICEROY *Basilarchia archippus* (Cramer)

K17:8

ABUNDANCE : Common.

HABITAT : Wet shrubby areas.

SEASON : Early June to mid-September; two broods.

FOODPLANTS : Reared locally on Willows (*Salix* spp.) and Balsam Poplar (*Populus balsamifera*).

REMARKS : The Viceroy is one of the best-known examples of an edible species mimicking an inedible one, in this case the Monarch. The Viceroy can be distinguished from the Monarch by its smaller size, different flight pattern, and the presence of a black transverse band on the hindwings. There is a surprising lack of records from the Quebec side of the Ottawa District, with not a single record from Gatineau Park.

HACKBERRY BUTTERFLY *Asterocampa celtis* (Boisduval & LeConte)

K14:15

ABUNDANCE : Extremely rare.

HABITAT : Vicinity of Hackberry trees.

SEASON : In southern Ontario, July to early September; two broods.

FOODPLANTS : Hackberry (*Celtis occidentalis*).

REMARKS : One specimen of this butterfly was found recently among miscellaneous material in the Canadian National Collection, labelled 'City View, 14 September 1924, F.H. Chermock'. City View is now a part of the City of Nepean. The Hackberry Butterfly has not been recorded in the District since; however, it breeds regularly as far north as Montreal. Hackberry, the larval foodplant, is locally distributed in the District, mainly along the margins of the Ottawa and Rideau Rivers. There are probably other stands of Hackberry along the Ottawa River between Ottawa and Montreal, possibly making an almost continuous corridor of the foodplant linking the Ottawa District to breeding colonies near Montreal. The adult is very localized to the vicinity of the foodplant and should be looked for where stands of Hackberry occur in the District.



Question Mark



Comma

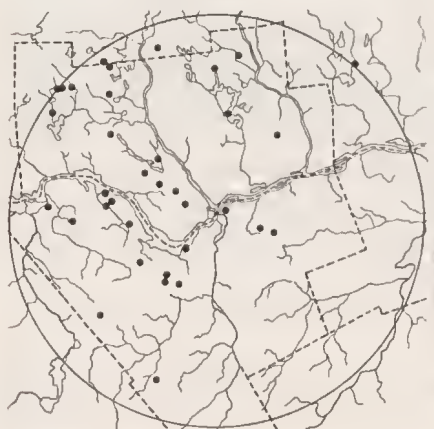


Green Comma



Gray Comma •

Satyr Angle Wing ▲



Compton Tortoise Shell



Mourning Cloak



Milbert's Tortoise Shell

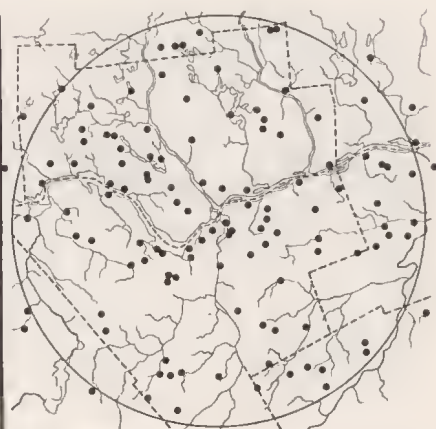


American Painted Lady •

Buckeye ▲



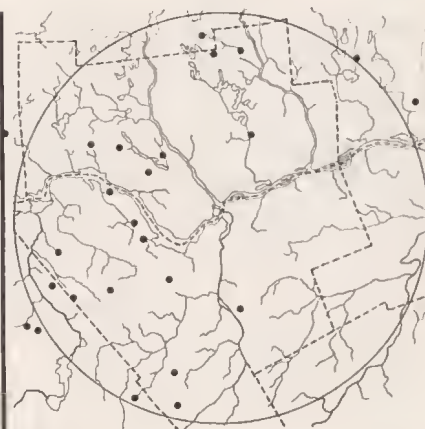
Painted Lady



Red Admiral



Great Spangled Fritillary



Aphrodite



Atlantis Fritillary

*Freija Fritillary ■
Variegated Fritillary ▲



Silver Bordered Fritillary



Meadow Fritillary

Bog Fritillary ▲



Pearl Crescent



Silvery Checkerspot ●

Tawny Crescent ▲



Harris' Checkerspot



Baltimore



White Admiral



Viceroy

Hackberry Butterfly ▲



Pearly Eye

Family SATYRIDAE Satyrs and Wood Nymphs

All of our eight local members of this family are medium-sized, dull-brown butterflies, with at least one pair of eye-spots on the wings, and usually more. Some are among our commonest butterflies while others are extremely local, but all are very habitat-specific.

Their ova are roughly spherical, with very faint ribbing. The larvae are smooth, green or brown, and very rarely seen, being nocturnal feeders. All use grasses or sedges as their foodplants. They can be distinguished from Skipper larvae by their lack of a 'neck' and by the forked appearance of the last segment. Some pupate suspended by the cremaster, others in a crude cell at the ground surface.

PEARLY EYE *Lethe anthedon borealis* (Clark)

K7:8

ABUNDANCE : Uncommon to common.

HABITAT : Deciduous woodlands.

SEASON : Late June to early August.

FOODPLANTS : Grasses.

REMARKS : This is one of the few species in the Ottawa District which is a true shade-loving woodland butterfly. It is regularly seen along woodland roads and trails but, unlike most species seen in this habitat, will dodge back in among the trees if disturbed. Its flight is stronger and more direct than that of most Satyrids. The purplish-brown of its underside and its habit of landing on tree trunks allows it to blend very well into its surroundings. (The distribution map for this species is on the preceding page.)

EYED BROWN *Lethe cantheus boisduvalli* (Harris)

Fig. 29

ABUNDANCE : Common, locally abundant.

HABITAT : Open wet areas.

SEASON : Late June to early August.

FOODPLANTS : Sedges (*Carex* spp.); locally reared on Beaked Sedge (*C. rostrata*).

REMARKS : This butterfly and the next were long considered to be the same species; Klots' illustration of the Eyed Brown is actually an Appalachian Eyed Brown. (See Figures 29 and 30 on page 59.) The Eyed Brown has a weak bouncing flight and is normally seen in open, sedgy areas, often landing in among the plants.

APPALACHIAN EYED BROWN *Lethe appalachia leewardi*

Gatrelle & Arbogast K10:4

ABUNDANCE : Rare, extremely local.

HABITAT : Sedgy wood margins.

SEASON : July.

FOODPLANTS : Sedges (*Carex* spp.).

REMARKS : The Appalachian Eyed Brown, recognized to be a distinct species only in 1970, was unknown locally before 1976.

The first colony found, near Bells Corners, represented a northward range extension of several hundred kilometres. The species is restricted to wet, shaded wood margins bordering on open sedge areas. The much commoner Eyed Brown usually occurs in the adjacent open areas, often only a few feet away, but the two species never intermingle. In addition to the difference shown in Figures 29 and 30 on page 59, the Appalachian Eyed Brown is violet-brown while the Eyed Brown is usually yellowish-brown.

LITTLE WOOD SATYR *Megisto cymela* (Cramer)

K7:1

ABUNDANCE : Common.

HABITAT : Woodlands and wood margins.

SEASON : Early June to early July.

FOODPLANTS : Grasses.

REMARKS : This species has a weak, bouncing flight, but it is surprisingly hard to catch as it dodges into undergrowth and bushes. It is found on flowers near the edge of woods much more often than our other woodland Satyrs.

INORNATE RINGLET *Coenonympha inornata* Edwards

K10:7

ABUNDANCE : Abundant.

HABITAT : Open areas.

SEASON : Early June to early July, mid-August to mid-September.

FOODPLANTS : Grasses.

REMARKS : This is another weak-flying species, which stays close to the ground even when disturbed. It is an avid flower visitor. The Nipisiquit Ringlet, formerly believed to be a separate species, is now considered to be only a partial second generation of the Inornate Ringlet. The three second generation records in the Quebec part of the Ottawa District were each single specimens only; the Ottawa River seems to represent the northern limit of the second generation in our area.

WOOD NYMPH *Cercyonis pegala nephele* (Kirby)

K7:5,6

ABUNDANCE : Common.

HABITAT : Old fields.

SEASON : Early July to late August.

FOODPLANTS : Grasses.

REMARKS : The northern subspecies of this butterfly found in the Ottawa District is quite different in appearance from the more southern forms illustrated in Klots. Our Wood Nymph is much darker, very nearly black, and has no yellow colour in the patch on the forewing.

CHRYXUS ARCTIC *Oeneis chryxus strigulosa* McDunnough

K7:10

ABUNDANCE : Occasionally common, extremely local.

HABITAT : Very dry, sandy or rocky areas.

SEASON : Late May to early June.

FOODPLANTS : Reared on Poverty Grass (*Danthonia spicata*) in Hastings County.

REMARKS : Both our species of Arctics are very powerful fliers and are extremely wary and difficult to approach. The Chryxus Arctic normally lands on the ground where, especially on lichen-covered rocks, its finely-mottled underside renders it almost invisible.

JUTTA ARCTIC *Oeneis jutta ascerta* Masters & Sorensen

K8:1

ABUNDANCE : Local, uncommon to common.

HABITAT : Black Spruce bogs.

SEASON : Late May to early June.

FOODPLANTS : Sedges or grasses; suspected to be Dense Cotton-grass (*Eriophorum spissum*), a sedge.

REMARKS : The Jutta Arctic is known locally only from the Mer Bleue. It is widespread in the bog but tends to concentrate around the edges of Black Spruce patches. It rarely visits flowers and often lands on the trunks of dead Spruces.

Family DANAIDAE

Monarchs

We have only one member of this small family, the familiar Monarch. All members of the family are large butterflies, whose larvae feed on plants which are poisonous to most other herbivores. All stages of the butterflies are distasteful to predators, and larvae and adults bear bright warning colours.

The ova are very similar to those of the *Nymphalidae*, though larger, but the larvae and pupae are very different. The larvae are never spiny, but have fleshy horns; the pupae are short and rounded, and are suspended from the cremaster.

MONARCH *Danaus plexippus* (Linnaeus)

K10:1

ABUNDANCE : Variable, uncommon to common.

HABITAT : Everywhere except deep woods.

SEASON : Early June to late September.

FOODPLANTS : Common Milkweed (*Asclepias syriaca*), one record locally on Swamp Milkweed (*A. incarnata*).

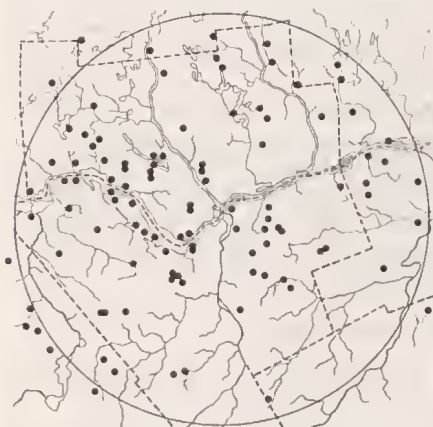
REMARKS : The Monarch is probably the best-known migratory butterfly in the world. Incredibly, individuals from all over eastern North America overwinter in a few limited areas in northern Mexico and return at least part way in the spring. The numbers reaching our area vary widely from year to year, presumably because of weather conditions along their route. The Monarch is the only local butterfly whose larvae feed on poisonous plants, thereby rendering the species both poisonous and distasteful to predators. Its large size, gliding flight and frequent appearance in city gardens make it probably the best known butterfly in our area.



Eyed Brown



Appalachian Eyed Brown • Jutta Arctic ■ Chryxus Arctic ▲



Little Wood Satyr



Inornate Ringlet
First generation • Both generations ■



Wood Nymph



Monarch

Possible Species

The species listed below are ones for which there is some reason to believe that they may be found within the Ottawa District, although there are no records known.

SOUTHERN CLOUDY WING *Thorybes bathyllus* (J.E. Smith) K27:3

Several larvae, corresponding exactly to the description of the larvae of this species, were found in 1980 near Constance Lake and near Limbour on Hog Peanut (*Amphicarpaea bracteata*). None survived to emerge, and no adults were found in 1981 at either site. It may well be that the larval descriptions are wrong, as Skipper larvae are notoriously poorly known. The nearest known records for the species are from the Toronto area.

LAURENTIAN SKIPPER *Hesperia comma laurentina* (Lyman) K34:1,2

This northern species was once reported from Gatineau Park, but no specimens can be found. It is widespread in Algonquin Park and has been collected from Dacre, 40 km west of the District. It flies in August and September and should be sought in any of the more boreal parts of the District, such as Ramsay Lake in Gatineau Park, the area around Lac la Blanche, and the highest parts of the Gatineau Escarpment.

WEST VIRGINIA WHITE *Artogeia virginiensis* (Edwards) K25:5

This delicate white butterfly has been confused for many years with the much more common and northerly Mustard White. It flies in May with the first brood of the Mustard White, in moist deciduous woodlands where its larval foodplants, Toothworts (*Dentaria* spp.), occur. The West Virginia White is Ontario's only protected butterfly species, which means that it is illegal to collect it; however, it is so similar to the Mustard White that at least a clear photograph of the underside would be necessary before it could be accepted as a confirmed record for the District. The nearest record is from Frontenac County, 55 km southwest of the District.

DORCAS COPPER *Epidemia dorcas* (Kirby) K18:6

Recorded from the Muskoka District, this Copper is a northern and western species that is found only in a few widely separated locations in Ontario. It should be sought in late July and early August near its larval foodplant, Shrubby Cinquefoil (*Potentilla fruticosa*). Several good stands of the plant are known along the banks of the Ottawa River west of the city.

This distinctive Hairstreak has been taken in the Chaffey's Locks area, some 55 km southwest of the District. It is very localized to the vicinity of its larval foodplant, Red Cedar (*Juniperus virginiana*). It flies in June and spends most of its time perching on the leaves of the foodplant, from which it can be flushed by beating on the trees. A few stands of Red Cedar are known on the Gatineau Escarpment, near Carp, and also near Merrickville, just south of the District.

BOG ELFIN *Incisalia lanoraieensis* Sheppard

K16:20

A resident of Spruce-Tamarack bogs, this Elfin has a limited range. It has been recorded only from Quebec, Maine and Nova Scotia. It was described from specimens from Lanoraie Bog near Montreal, a large bog which shares many features with the Alfred Bog, just east of the District. It should be sought there and in bogs within the District in late May. It can be distinguished from the Pine Elfin by its small size and smudged underside markings. (Compare Figures 14 and 16.)

WESTERN PINE ELFIN *Incisalia eryphon* (Boisduval)

Fig. 15

This western counterpart of the Pine Elfin has been reported from Algonquin and Laverendrye Parks, where it flies in sandy boreal forest areas near Pines, the larval foodplants. It is similar in appearance to the Pine Elfin but is best distinguished from it by the zigzag line on the hindwing underside. (Compare Figures 14 and 15.) It is most likely to occur in suitable habitats in the northern part of the District.

HOARY COMMA *Polygonia gracilis* (Grote & Robinson)

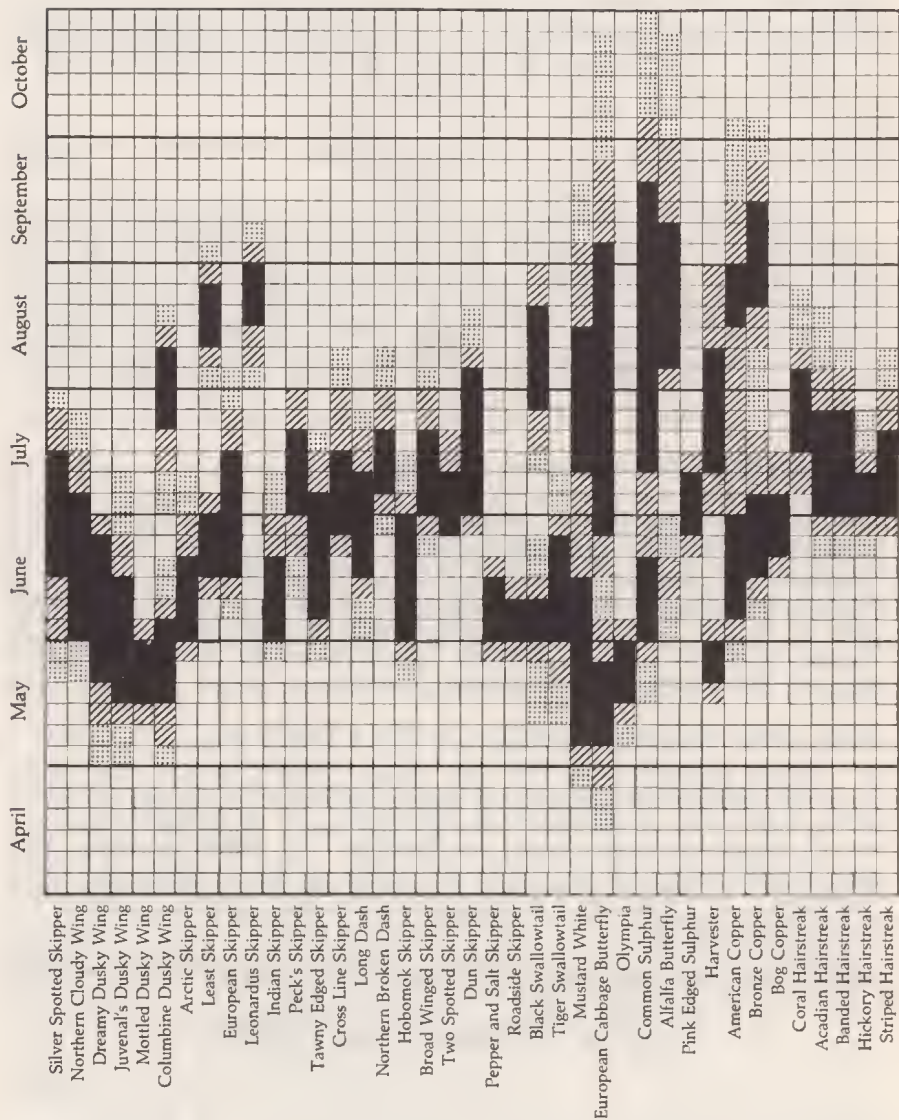
K14:5

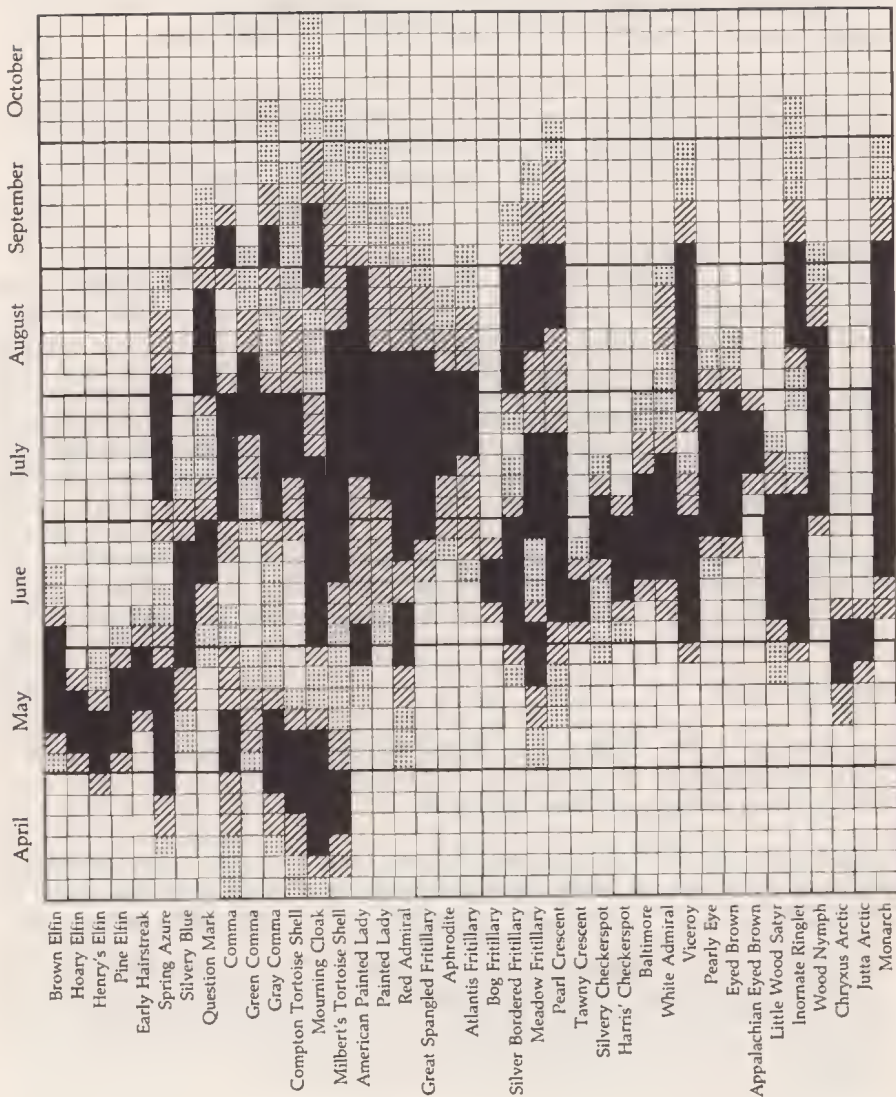
The Hoary Comma was mistakenly recorded once from the District based on a misidentified specimen. It is primarily a boreal forest species, rarely collected. It might be found in more boreal parts of the District, such as Ramsay Lake in Gatineau Park. It could be confused with the Gray Comma. (Compare Figures 21 and 22.)

Flight Season Graphs

These graphs, for the 78 most common species of the Ottawa District, are taken completely from the records of RAL and summarize information gained in fifteen years of collecting and observing butterflies in the District.

The black bars represent the peak(s) of the flight season for each species. The diagonal cross-hatched areas represent times when the species can usually be found but in much smaller numbers. The dotted areas represent the extreme limits of the flight seasons.





Bibliography

GENERAL WORKS

Howe, W.H. 1975. *Butterflies of North America*. Doubleday and Sons, Garden City, N.J. This large, expensive volume has a very comprehensive coverage but is not useful for beginners.

Klots, A.B. 1951. *A field guide to the butterflies of North America, east of the Great Plains*. Houghton Mifflin Co., Cambridge, Mass. This is one of the Peterson Field Guide series and is still the best guide for eastern North American butterflies.

Miller, L.D. and F.M. Brown. 1981. *A catalogue/checklist of the Rhopalocera of America north of Mexico*. The Lepidopterists' Society, Memoir No. 2. This is the most recent checklist available; it contains the current scientific names.

Mitchell, R.T. and H.S. Zim. 1962. *Butterflies and moths, a guide to the more common species*. Golden Press, New York, N.Y. This is a small, inexpensive pocket guide to the better-known species. It is particularly useful for its illustrations of the early stages of many species.

Pyle, R.M. 1981. *The Audubon Society field guide to North American butterflies*. Alfred Knopf, New York, N.Y. This is the first field guide to the butterflies using only photographs taken in nature.

EARLIER LISTS

Lafontaine, J.D. 1969. *The butterflies of the Ottawa region*. Trail & Landscape 2(4): 94-97. The first checklist of the butterflies of the Ottawa District.

Lafontaine, J.D. 1972. *More butterflies*. Trail & Landscape 6(3): 94-95. Gives some additions and deletions from the 1969 list.

Layberry, R., D. Lafontaine and P. Hall. 1981. *Butterflies: some old, some new, some help from you*. Trail & Landscape 15(3): 118-122. This is an annotated list of those species in the Ottawa District for which more information and records were requested to help complete the present article.

SPECIALIZED WORKS

A number of journals for specialists carry articles which are useful to anyone interested in the butterflies of the Ottawa District. The best known of these are *Journal of the Lepidopterists' Society* and *Journal of Research on the Lepidoptera*. For information on these journals contact the authors.

Checklist of the Butterflies of the Ottawa District

CLASS *INSECTA*: Insects

ORDER *LEPIDOPTERA*: Butterflies and Moths

FAMILY *HESPERIIDAE*: Skippers

Silver Spotted Skipper	<i>Epargyreus clarus</i>
Northern Cloudy Wing	<i>Thorybes pylades</i>
Dreamy Dusky Wing	<i>Erynnis icelus</i>
Juvenal's Dusky Wing	<i>Erynnis juvenalis</i>
Mottled Dusky Wing	<i>Erynnis martialis</i>
Columbine Dusky Wing	<i>Erynnis lucilius</i>
*Grizzled Skipper	<i>Pyrgus centaureae</i>
Common Sooty Wing	<i>Pholisora catullus</i>
Arctic Skipper	<i>Carterocephalus palaemon mandan</i>
Least Skipper	<i>Ancyloxypha numitor</i>
European Skipper	<i>Thymelicus lineola</i>
Leonardus Skipper	<i>Hesperia leonardus</i>
Indian Skipper	<i>Hesperia sassacus</i>
Peck's Skipper	<i>Polites coras</i>
Tawny Edged Skipper	<i>Polites thermistocles</i>
Cross Line Skipper	<i>Polites origenes</i>
Long Dash	<i>Polites mystic</i>
Northern Broken Dash	<i>Wallengrenia egeremet</i>
*Little Glassy Wing	<i>Pompeius verna</i>
Mulberry Wing	<i>Poanes massasoit</i>
Hobomok Skipper	<i>Poanes hobomok</i>
Broad Winged Skipper	<i>Poanes viator</i>
Dion Skipper	<i>Euphyes dion</i>
Two Spotted Skipper	<i>Euphyes bimacula</i>
Dun Skipper	<i>Euphyes ruricola metacomet</i>
Pepper and Salt Skipper	<i>Amblyscirtes hegon</i>
Roadside Skipper	<i>Amblyscirtes vialis</i>

FAMILY *PAPILIONIDAE*: Swallowtails

Black Swallowtail	<i>Papilio polyxenes asterius</i>
Tiger Swallowtail	<i>Papilio glaucus canadensis</i>

FAMILY *PIERIDAE*: Whites and Sulphurs

Checkered White	<i>Pontia protodice</i>
Mustard White	<i>Artogeia napi oleracea</i>
European Cabbage Butterfly	<i>Artogeia rapae</i>
Olympia	<i>Euchloe olympia rosa</i>
Common Sulphur	<i>Colias philodice</i>
Alfalfa Butterfly	<i>Colias eurytheme</i>
Pink Edged Sulphur	<i>Colias interior</i>
Little Sulphur	<i>Eurema lisa</i>

FAMILY *LYCAENIDAE*: Gossamer Winged Butterflies

Harvester	<i>Feniseca tarquinius</i>
American Copper	<i>Lycaena phlaeas americana</i>
Bronze Copper	<i>Hyllolycaena hyllus</i>
Bog Copper	<i>Epidemia epixanthe michiganensis</i>
Coral Hairstreak	<i>Harkenclenus titus</i>
Acadian Hairstreak	<i>Satyrium acadica watrini</i>
Edwards' Hairstreak	<i>Satyrium edwardsii</i>
Banded Hairstreak	<i>Satyrium calanus falacer</i>
Hickory Hairstreak	<i>Satyrium caryaevorus</i>
Striped Hairstreak	<i>Satyrium liparops strigosa</i>
Brown Elfin	<i>Incisalia augustinus</i>
Hoary Elfin	<i>Incisalia polios</i>
Henry's Elfin	<i>Incisalia henrici</i>
Pine Elfin	<i>Incisalia nippon clarki</i>
Gray Hairstreak	<i>Strymon melinus humuli</i>
Early Hairstreak	<i>Erora laeta</i>
Eastern Tailed Blue	<i>Everes comyntas</i>
Spring Azure	<i>Celastrina ladon</i>
Silvery Blue	<i>Glaucopsyche lygdamus couperi</i>
*Saepiolus Blue	<i>Plebejus saepiolus amica</i>

FAMILY *NYMPHALIDAE*: Brush Footed Butterflies

Question Mark	<i>Polygonia interrogationis</i>
Comma	<i>Polygonia comma</i>
Satyr Angle Wing	<i>Polygonia satyrus</i>
Green Comma	<i>Polygonia faunus</i>
Gray Comma	<i>Polygonia progne</i>
Compton Tortoise Shell	<i>Nymphalis vau-album j-album</i>
Mourning Cloak	<i>Nymphalis antiopa</i>
Milbert's Tortoise Shell	<i>Aglais milberti</i>
American Painted Lady	<i>Vanessa virginiensis</i>
Painted Lady	<i>Vanessa cardui</i>
Red Admiral	<i>Vanessa atalanta rubria</i>
Buckeye	<i>Junonia coenia</i>
Variegated Fritillary	<i>Euptoieta claudia</i>
Great Spangled Fritillary	<i>Speyeria cybele</i>
Aphrodite	<i>Speyeria aphrodite winni</i>

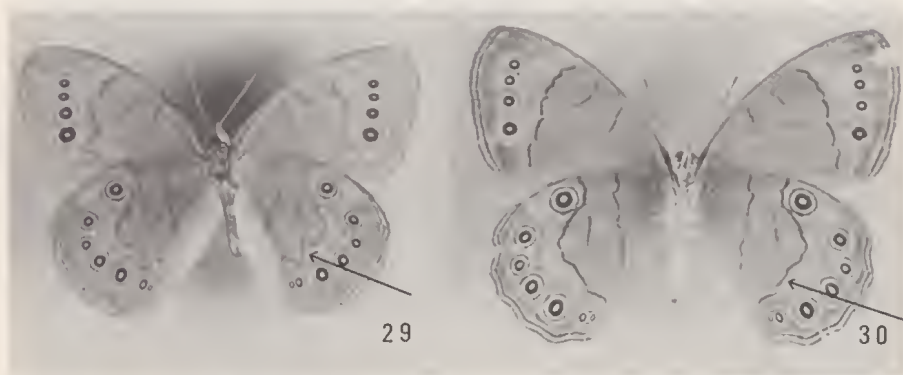
Atlantis Fritillary	<i>Speyeria atlantis</i>
Bog Fritillary	<i>Procllossiana eunomia dawsoni</i>
Silver Bordered Fritillary	<i>Clossiana selene astocalis</i>
Meadow Fritillary	<i>Clossiana bellona toddi</i>
*Freija Fritillary	<i>Clossiana freija</i>
Pearl Crescent	<i>Phyciodes tharos</i>
Tawny Crescent	<i>Phyciodes batesii</i>
Silvery Checkerspot	<i>Charidryas nycteis</i>
Harris' Checkerspot	<i>Charidryas harrisii</i>
Baltimore	<i>Euphydryas phaeton</i>
White Admiral	<i>Basilarchia arthemis</i>
Viceroy	<i>Basilarchia archippus</i>
Hackberry Butterfly	<i>Asterocampa celtis</i>

FAMILY SATYRIDAE: Satyrs and Wood Nymphs

Pearly Eye	<i>Lethe anthedon borealis</i>
Eyed Brown	<i>Lethe cantheus boisduvalli</i>
Appalachian Eyed Brown	<i>Lethe appalachia leewii</i>
Little Wood Satyr	<i>Megisto cymela</i>
Inornate Ringlet	<i>Coenonympha inornata</i>
Wood Nymph	<i>Cercyonis pegala nephele</i>
Chryxus Arctic	<i>Oeneis chryxus strigulosa</i>
Jutta Arctic	<i>Oeneis jutta ascerta</i>

FAMILY DANAIIDAE: Monarchs

Monarch	<i>Danaus plexippus</i>
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Figures 29 and 30 Eyed Browns, underside, $\times 1\frac{1}{2}$

29. Eyed Brown 30. Appalachian Eyed Brown

President's Message

During the past three years, it has been my honour to be President of The Ottawa Field-Naturalists' Club, and I shall soon be stepping down from that post. It has been a time-consuming job, sometimes frustrating and tedious, but often rewarding and fulfilling. I have come to know many members of the Club very well, and, contrary to what you might be tempted to think, this has led to a strengthening of friendship with them. I am, quite frankly, looking forward to the Annual Business Meeting when I shall hand over the reins to my successor, but I have no regrets about having taken on the presidency of The Ottawa Field-Naturalists' Club. It is not nearly so fearsome a job as it might appear to the outsider, with the support provided by the Council and, in particular, by the three Vice-Presidents (Courtney Gilliatt, Loney Dickson and Dan Brunton) who have worked so enthusiastically with me.

The past three years have been eventful ones for the Club, and many significant changes have taken place. 1979 was our Centennial year. That wonderful birthday party, held in the saloon of the National Museum of Natural Sciences on March 19, kicked off six months of participatory celebration ending with the Centennial picnic on September 16 at Church Hill picnic grounds in Gatineau Park. We had a lot of fun that year, and an awful lot of people worked hard to bring about the successful conclusion of many Centennial projects. There are some that are still ongoing, for example, the soon-to-be-completed *Orchids in the Ottawa District*, and the impetus from that year will be felt for many years to come. We owe a great deal to those who had the foresight to plan several years ahead for 1979. There are literally hundreds of people that could be mentioned in connection with the Centennial, but the one who comes to mind as being absolutely essential to its success is Hue MacKenzie, who was chairman of the Centennial Steering Committee, co-ordinated all of the early planning.

During that Centennial year, the Conservation Committee was hard at work continuing the preparation of submissions to the Regional Municipality of Ottawa-Carleton that they had been doing in the previous year. The object of these submissions was to assist in the identification of significant natural environment areas within Ottawa-Carleton and have them so designated in the Regional Official Plan. We were very gratified with the response of the regional planning staff to our submissions, but unfortunately we have been blessed with several politicians who tend to view swamps as eyesores to be drained and filled and hardwood forests as prime building lots. As it stands now, the Official Plan does provide a fair degree of protection for many of the significant areas of the Region. But, already, amendments are

being put forward that could jeopardize the entire concept of natural environment areas. In particular, we and several other groups have called for an OMB hearing into Amendment 24 passed by Regional Council which would enable Campeau Corporation to develop approximately one-third of the South March Highlands natural environment area, just to the west of Kanata. Gone would be the woodlands around the Kanata Beaver Pond, a fine example of Canadian Shield outcrop land, and another of the dwindling number of deeryards in Ottawa-Carleton. Also placed in jeopardy would be a magnificent hardwood stand on either side of Goulbourn Side Road. Concerned residents of the area should call Martha Webber at 839-5217 or me at 731-9270. Your support is vital to the success of our objections.

The Conservation Committee has not restricted its activities to local issues but also has been increasingly involved in national and provincial issues. Letters have gone out under my signature concerning such issues as Polar Bear Pass, the Grasslands National Park, Backus Woods (near Long Point), Oshawa Second Marsh, the status of whales, and the raccoon dog controversy. As a result, the Club has become more visible (we get more junk mail), and we have a closer working relationship with the Canadian Nature Federation, the Federation of Ontario Naturalists, and the National and Provincial Parks Association. A lot of credit for this activity must go to Loney Dickson, who for a year and a half was chairman of the Conservation Committee.

Another important development during the last couple of years has been the re-establishment of special interest groups within the Club. Loney Dickson, in his capacity of Vice-President, brought forward the idea and was absolutely staggered by the response. There are now active, enthusiastic groups studying such subjects as Birds, Botany, Bugs (insect and shutter) and Butterflies. For further information about the groups, please call Dan Brunton at 829-7307. With the operation of these groups, coffee and tea at the monthly meetings, and a return to the concept of a soirée, the Club, despite its size, is managing to become more intimate and more social at the membership level than it has been for several years.

Yet another important development has been the establishment of an Awards Committee. The original motivation for setting up the committee was to ensure that deserving Club members were nominated for awards given by other organizations in the fields of natural history and conservation. Out of that grew the idea that awards should be created within the Club itself, in addition to the Honorary Membership. In the last issue of *Trail & Landscape*, Stephen Darbyshire has outlined the nature of these awards, and we look forward with interest to see who the first winners will be. If you have not already got your nominations in, don't wait any longer.

As I am sure you know, the Club publishes three periodicals,

and every one of them has undergone changes of editorship during the last three years. After thirteen years as founding editor of *Trail & Landscape*, Anne Hanes resigned and Joyce Reddoch took over beginning with the first issue of 1980. At the same time, Bruce Barrett, founding editor of *The Shrike*, left town and Tom Hince took over the job starting with the first issue of Volume 5. More recently I have replaced Tom. Finally, at the beginning of 1981, Lorraine Smith resigned as editor of *The Canadian Field-Naturalist* after nine and a half years. Very fortunately we were able to find a very able replacement in Francis Cook.

In the course of my term as President, there have been many satisfying moments and many happy memories, but inevitably there have been some sad ones too. We lost four very popular Honorary Members, Father Banim, Bill Baldwin, Doug Clarke and Charlie Sternberg. Also, another well-known and popular figure, George Findlay, passed away recently in Carleton Place. (See the previous issue of *Trail & Landscape*.) But the passing that affected me, on a personal scale, the greatest was the death of Anne Hanes last October. I have a lot of warm and wonderful memories of Anne, and I shall always think of her when I read *Trail & Landscape*. As chairman of Excursions and Lectures, I used to ship material over to her for every issue and negotiate deadlines, and she was so tolerant (too tolerant) with the jumble of notes that used to reach her. It seemed inconceivable that the Club could be the same without Anne. But it will carry on. It is strong and healthy. Others have taken her place, and the Club will continue to grow, diversify and build on its one-hundred-and-three-year-old legacy.

Roger Taylor

Wetlands Policy Workshop

January 9, 1982

This one-day conference is designed to bring in policies regarding fresh water wetlands to be presented through the Federation of Ontario Naturalists to the Ontario Government.

Afternoon sessions, in groups, will bring forward policy recommendations which will be announced in the late afternoon at the plenary session.

Wetlands are vital ecosystems, and your input is needed. Registration is \$10. (\$7. for students). You can pre-register by mailing your cheque (including return address, please) to: Wetlands Policy Workshop, c/o Isabel Bayly, Department of Biology, Carleton University, Ottawa, Ontario K1S 5B6. For further information, phone Isabel at 231-3836 or 827-2369.

Anne

Club members will be saddened to learn of the death of Anne Hanes, long-time member of The Ottawa Field-Naturalists' Club and founding editor of *Trail & Landscape*. Anne was an outstanding naturalist, as those who profited from her expertise on field trips will testify. Her interests covered many facets of natural history - the flowering plants of the Ottawa area, bog ecology, birdsong, orchids, butterflies, ferns, lichens, mosses, mammals. A study on trilliums, carried out jointly with her husband, Gary, appeared in an early issue of *Trail & Landscape*.

An artist by profession, Anne's pen and ink sketches enriched the pages and covers* of *Trail & Landscape*, and other nature and conservation publications. Professionally, she had provided illustrations for several botanical studies, notably works on the mosses of the Maritimes by Robert Ireland, the grasses of Canada by Mary Barkworth, and the alfalfas of the world by Ernest Small.

Although natural history was her first interest, she devoted precious time and talent to conservation issues, adding her weight in the struggle to save Catineau Park and other wildlands. Anne was especially active in the long and hard-fought battle for Niven's Woods.

Years of exploring the nooks and crannies of wild places in company with Anne have left a happy legacy. Memories of long tramps and ski treks through wild back country, of exploring big cedar swamps and paddling rocky shorelines, memories of wolf howling and beaver watching, of thrushes singing at daybreak, and barred owls hooting in the dust as we trudged wearily homeward, the great search for calypso, and the delight of discovering apple moss, ginseng, Baltimore butterflies - happy recollections.

To Anne's husband, Gary, and son, Kevin, goes the warm sympathy of a host of friends in The Ottawa Field-Naturalists' Club. Gary has requested that memorial tributes take the form of donations to the natural history or conservation organization of your choice. It is anticipated that The Ottawa Field-Naturalists' Club will set up a special award in Anne's name, as a memorial to a talented naturalist who gave generously of her talents to her fellow naturalists. Your support for this proposal should be directed to the Council of the Club.

Shiela C. Thomson

* Anne's cover designs, with their delightfully appropriate symbols of the seasons, continue to give pleasure to the readers of each issue of *Trail & Landscape*. JMR

Recent Bird Sightings



Stephen Gawn

Rain and more rain! It seemed that those were the most commonly heard words in September and October of 1981. September was especially wet with some 60 mm more rain than average. October, though not quite so wet, was cooler than normal.

Did all this rain affect the birds? If a lower than average number of rare birds is a true indication, then the answer is yes. There are several reasons for this shortage of rarities. Shorebirds (Sandpipers and Plovers) provide a large number of the rare species. They have narrow requirements with respect to water depth, and with the sewage lagoons brimming over with rainwater, the shorebirds were limited to the river shoreline. When the river level went up, all the suitable habitat went and so did the shorebirds.

What about the birds not dependent on water levels? The shortage of rarities here is more likely due to the rain keeping birders indoors rather than any real affect on the birds themselves. Puddle ducks, however, were affected. They did not need to come to the river; instead they gathered at puddles in flooded fields and sewage lagoons.

The first part of September is usually the most exciting of the period since fall migration is still in full swing. Rare shorebirds observed included a Western Sandpiper (September 4), Buff-breasted Sandpiper (September 2 and 3), Hudsonian Godwit (September 3 and 20) and 18 Whimbrels on September 2. There were good numbers of the commoner shorebirds at both Ottawa Beach and Shirley's Bay until September 6. That night, the river level went up and very few more shorebirds were recorded, the exception being the ploughfield-loving Golden Plover. Two large flocks were recorded: one of approximately 250 birds along Fallowfield Road and another of 300 near Arnprior. Both these flocks contained birds in all stages of plumage and moult, and neither contained any Black-bellied Plover.

Jaegers provided excitement along the river. A minimum of three Parasitics was recorded between September 1 and 19. Most of the time only distant sightings were made; however, the occasional observer was lucky enough to get good views. Merlins were reported in above average numbers. A Carolina Wren was spotted at Vincent Massey Park on September 6. The male House Finch which took up residence in the west end some years ago was observed only September 7 to 10.

Sharp-tailed Sparrows are considered rare in the Ottawa area. Their rarity may simply be that they are being overlooked due to their quiet ways and forbidding habitat. There are two ways to see this species: hard work or good luck. On September 24, birders checking shorebirds at an east end sewage lagoon spotted one of these elusive sparrows in the vegetation. Another was found on September 30 by an early rising birder who donned his rubber boots and made a determined search of Ottawa Beach to find his quarry.

By the time October rolls around, fall migration is gearing down. Many migrant species have completely passed through, and a lot of the smaller birds that are now present are those that will spend the winter. Birders now shift their attention to waterbirds and birds of prey.

A Golden Eagle was observed over the Gatineau. Ninety-three Rough-legged Hawks were recorded near Arnprior on Hallowe'en. A male Barrow's Goldeneye was observed on September 27 and October 25 near Ottawa Beach. A good flight of Boreal Chickadees was noted, while Snowy Owls and Northern Shrikes put in but token appearances.

Ottawa's fifth White-fronted Goose was recorded October 25 among the multitude of Canada Geese at Ottawa Beach. Although it was seen up until at least October 30, birders could not agree if it was the Greenland or Canadian race. A white morph Snow Goose alternated feeding at Ottawa Beach and Shirley's Bay, while many more were observed flying south.

Gulls are usually an ongoing concern in the last part of October. By that time, the Ring-billed Gull of summer has largely been replaced by its larger cousin, the Herring Gull. Interestingly, the Herring Gulls come in in two waves. The first consists of adults, which arrive in late October only to be replaced by younger birds in November. Both Iceland and Glaucous Gulls were recorded on October 24.

The closing days of October bring a taste of winter birding. Enough, perhaps, for birders to start anticipating whether it will be a Snowy Owl winter, a Three-toed Woodpecker winter, a Great Gray Owl winter ...

FRUIT-BEARING SHRUBS FOR MEMBERS - A REMINDER

Don't forget the offer of Highbush-cranberry plants described on page 220 in *Trail & Landscape* 15(4). If you are interested in reserving one or more of these plants, phone Bill Gummer at 596-1148 and 995-5909. You will receive a two-year-old shrub which will grow attractively and be useful to birds.

Rockcliffe Park

Stephen J. Darbyshire

In the summer of 1613, Samuel de Champlain made his first journey up the Ottawa River in search of the northern sea (Hudson Bay). This route was chosen for investigation because of the claim, which later became suspect, of an associate, Nicolas de Vigau, that he had been to the northern sea by travelling up the Ottawa River. It may be that other Europeans travelled up the Ottawa River prior to 1613, but Champlain was the first to write of his visit and to describe the region and its inhabitants.

As Champlain approached the mouth of the Gatineau River, he would have noticed a drastic change in the vegetation and topography of the shore to his left. During his nine-day canoe trip from Ile Sainte-Hélène to present day Ottawa, he passed through the flat clay plains of the lower Ottawa Valley. At the spot where the New Edinburgh Canoe Club now stands on the Ontario shore, the high clay bluffs give way to dripping limestone cliffs. He would have passed these cliffs paddling on the north side of the river where the current is weaker. At the mouth of the Gatineau River, he would have had an excellent view of the undulating shoreline of cliffs and high rocky slopes extending further than the eye can see almost to Chaudière Falls and broken only by Rideau Falls. The view Champlain had can be approximated today in a car by driving west along Jacques-Cartier Boulevard in Pointe Gatineau from the Canadian International Paper Company plant to the mouth of the Gatineau River.

The name of the area, derived from the prominent bedrock formations, is Rockcliffe. The community of Rockcliffe Park Village includes the area east of Rideau Falls to the New Edinburgh Canoe Club and south of the Ottawa River to the northern edge of Vanier in the area known as Beechwood. Most of the shoreline of the Ottawa River within Rockcliffe Park Village is administered by the National Capital Commission as Rockcliffe Park.

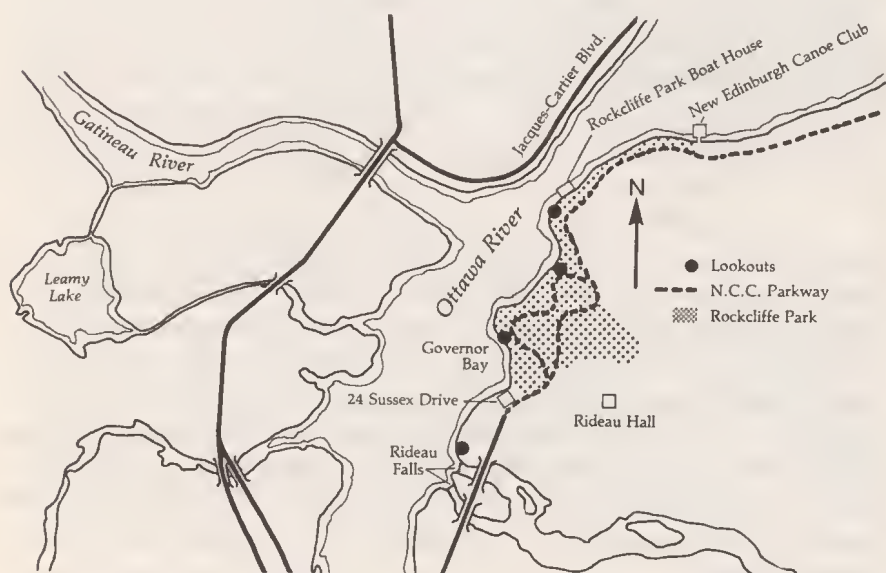
For the most part, the park itself consists of the land between the eastern parkway and the river. It is a very popular recreational area for its many striking views of the river and for its extensive open lawns. Rockcliffe Park also has features that attract little attention or interest from most of the visitors, but with a keen eye and the right point of view they can stir anyone with a sense of adventure.

On the east shore of Governor Bay, across from 24 Sussex Drive, along the dry rocky slopes between the lookout and the river is a colony of Hackberry (*Celtis occidentalis*) trees.

The colony may not have been here in Champlain's time as most of the individuals are young trees, saplings and seedlings. The largest tree is smaller than the average mature trees on the nearby island colonies (*Trail & Landscape* 15(2):68-73, (3): 133-139, 1981) which grow on moist to wet alluvial deposits. It may be that at this site trees rarely or never grow to full size. The slope is exposed to the westerly winds coming down the river valley and the soil is very thin. These factors alone will inhibit growth, but they also result in many windfalls. The larger the tree, the more susceptible it will be to strong winds.

Near the Hackberry grove is a thick tangle of Purple Clematis (*Clematis occidentalis*). The viney stems crawl over all the surrounding vegetation including the lower branches of trees. The large purple flowers appear in early to mid-summer.

To the east of Governor Bay in a small bay is an interesting animal resident of the park. At the head of the bay a small stream drains through a gully that is now mostly asphalt and lawn. One branch of the stream passes through a culvert under the parkway. In late summer and fall, the stream slows to a trickle with lots of Jewelweed and Nettles growing thickly in the saturated soil. In this stream a small colony of Two-lined Salamanders is living (*Trail & Landscape* 15(2): 75-109). These animals need running water in which to spend the larval stage of



Rockcliffe Park and Area

their life cycle. There is just enough water in this small stream to support a few larvae. The colony has been dwindling over the years as the runoff and seepage that would normally have formed part of the stream is diverted through the sewers of Rockcliffe Park Village.

In moist, shaded spots in a number of areas of the park lives another type of salamander, the Red-backed Salamander (*Trail & Landscape* 15(2): 75-109). The largest population occurs near the Rockcliffe Boat House. They are shy animals hiding under flat pieces of limestone along the cliff ledges and talus. They are rarely encountered without deliberate effort, but a persistent search will yield one to two dozen slender gray salamanders about 5 to 7 cm long. To naturalists already familiar with the Red-backed Salamander from the moist woods of the Gatineau hills, these animals will look very different. All the individuals in this colony have a lead gray to dark gray colour on the back without a trace of red. It is not unusual to find these 'leadbacked' salamanders, but it is unusual to find a colony entirely of this colour phase. Evidently this site has characteristics that are more favorable for the leadbacked colour phase than the red. As yet no one knows just why these two colour phases occur, or why colonies from different areas have different proportions of these phases.

If you are a good climber or have binoculars, you will be able to find the Slender Cliff Brake (*Cryptogramma stelleri*). This uncommon fern grows in thick clumps along the wet cliffs above the Rockcliffe Park Boat House. Fragile Fern (*Cystopteris fragilis*), Maidenhair Spleenwort (*Asplenium trichomanes*) and many other interesting vascular plants and lichens occur along these rich slopes and cliffs. This community, including the Red-backed Salamanders, depends on the steady seepage through the rock and the cool nature of the north-facing cliff, which never gets much direct sun.

For the casual urban birdwatcher, there is an excellent wooded hill between Rideau Hall and Buena Vista Drive, south and east of the parkway. A number of good trails lead through a variety of forest communities. The variety of vegetation on the hill provides for a good variety of food sources and good shelter for many birds. At the north side of the hill I found two seedlings of Horse Chestnut growing under Beech and Sugar Maple. Presumably these seedlings come from chestnuts from a nearby tree planted just northeast of the hill in a National Capital Commission lawn. It will be very interesting to see if these seedlings survive and become naturalized. This would be the first documented successful escape of this plant from cultivation in the Ottawa area.

For a very different view of Rockcliffe Park that even non-naturalists can enjoy, take a toboggan down some of the excellent hills this winter.

Council Report

Bill Gummer

The Council continues to register concern about urban development plans in areas designated as natural environment areas in the Regional Official Plan. The Club has entered an official objection with the Ministry of Housing regarding the proposed development of the southern part of the South March Highlands Natural Environment Area (described by Dan Brunton in *Trail & Landscape* 15(4): 190-193, 1981) and is preparing for its presentation before the Ontario Municipal Board.

The Council expressed relief at the news that plans have been dropped for dredging in Constance Creek, and for damming the Jock River near Richmond which would have flooded the environmentally significant and sensitive Richmond Fen during spring runoff.

The Council is very concerned at the decision of the Northwest Territories Council to permit native people to live-trap fifty Gyrfalcons for sale to Saudi Arabia. In view of the wide publicity that has been given in recent years to the unbalanced state of many northern raptors, the Territories' decision is surprising and regrettable. The Club has sent a letter expressing our concern to appropriate Territories authorities, and that letter has been acknowledged.

Editors for the Club's publications have been confirmed in their positions for this year:

The Canadian Field-Naturalist - Francis Cook

Trail & Landscape - Joyce Reddoch

The Shrike - Roger Taylor

The Club will feel the loss of three senior members, two of them among the select number of honorary members, in recent months - Douglas Clarke, Charles Sternberg and George Findlay. Together the membership of these three men represented 142 years of experience and participation in Club activities. Many have been their contributions towards the goals of the Club, and many the examples that they have set for others to follow.

Discussion has begun on the question of whether a fee increase may soon become necessary to maintain a balanced budget.

The Annual Business Meeting will be held on January 12 in the auditorium of the National Museum of Natural Sciences. Be sure to come and participate in the affairs of the Club.

N.C.C. Activities

WINTER ACTIVITIES AT MER BLEUE INTERPRETATION CENTRE

There will be "Open House" on weekends - Saturdays and Sundays - from 11 a.m. to 5 p.m. and from January 2 to March 14. The cafeteria will be open as well during these periods.

In the Centre, there will be special nature programs and logging history activities designed to provide interest for the whole family. Programs are on Sundays at 1:30 p.m. in French and 2:30 p.m. in English. Please phone 824-9714 for further details.

In the outdoor program, there will be guided snowshoe outings to explore the marsh in winter on January 30 and February 7 in French, and January 31 and February 6 in English. Outings start at 1:30 p.m.

Anderson Road Feeder Closing

The Anderson Road feeder near the Mer Bleue has been maintained by Jean Hastie on behalf of the Club for some years now. Jean was working right across the road from the feeder site and could keep a close eye on it. She has recently retired from that position, and so it would have been considerably more difficult for her to keep the feeding station working at full capacity. With all this in mind, it was decided to close the feeder down before this winter's clientele showed up.

There is still a feeder - and a good one - in the immediate area of the old feeding station. The National Capital Commission maintains an active feeder at the Mer Bleue Interpretation Centre near at hand. (See above.) In fact, we are pretty sure that most of the birds going to the Club feeder were already taking advantage of the Commission's feeder too, so I don't think the birds will be wanting for seed this winter.

We all owe Jean Hastie a real vote of thanks for her efforts at the Anderson Road feeder these past years. It was her idea in the first place; she had the feeder structure built and took care of the maintenance of it. It really was the Jean Hastie feeder, in more than just name. Her efforts, which have enhanced the enjoyment of thousands of winter recreationalists in Ottawa, are most appreciated, and I'm sure that I speak for all Club members in offering our thanks to her.

Dan Brunton
Chairman, Birds Committee

National Museum Activities

A workshop program on taxidermy, with Terry Morgan, Museum taxidermist, will cover skinning and cleaning a bird, and preparation of an artificial body. The bird will be mounted on the second evening. Register January 18 for the program on February 3 and 10 and February 15 for the program on March 3 and 10.

A second workshop, with Museum model-maker Ron Seguin and model and diorama technician René Leblanc, will instruct in creation of a diorama complete with habitat, vegetation and amphibians. Register February 1 for the program on February 17 and 24 and March 1 for the program on March 17 and 24. Telephone 996-3102 to register for both workshops.

Dinobus field trips are offered as follows:

English

Sunday, 17 January
Snowshoe outing - *Winter Twigs*

Sunday, 14 February
Cross-country skiing -
Nature in Winter

French

Sunday, 24 January
Snowshoe outing - *Les Rameaux d'hiver*

Sunday, 21 February
Cross-country skiing -
La Nature en hiver

Register starting Monday at 9 a.m. two weeks in advance of each excursion by telephoning 995-9060. Trips last from 10 a.m. to 4 p.m.

A series of interesting films will be shown, with live commentary by the film makers, all at 8 p.m.

English - Audubon Series

13 January - *Gifts of an Eagle* with Kent Durden

17 February - *Mountain Magic: Tetons, Banff and Alaska* with Walter H. Berlet

French - Découverte du Monde Series

3 February - *Bangladesh* with Claude Bordez

10 March - *Galapagos* with Pierre Marchand

Other films include *The Chiricahuas* and *The Biosphere* on January 3 and 4, and *Success Story* and *Insect Alternative* on February 20 and 21; and, in French, *La Chaine alimentaire* and *La Biosphere* on February 6 and 7, and *L'Aigle pêcheur* and *Baie James: environnement and ecologie* on February 13 and 14, all at 2 p.m.

Coming Events

arranged by the Excursions and Lectures Committee
Frank Bell (521-8046), Chairman

All times stated for excursions and walks are departure or starting times. Please plan to arrive ten minutes early to avoid being left behind; leaders start promptly. If you need a ride, don't hesitate to ask the leader.

Tuesday	ANNUAL BUSINESS MEETING
12 January	Meet: Auditorium, National Museum of Natural
8:00 p.m.	Sciences, Metcalfe and McLeod Streets
	The meeting will be followed by a twenty-minute
	National Film Board movie <i>Images of the Wild: A</i>
	<i>Portrait of Robert Bateman.</i>

Sunday WINTER BIRD BUS TRIP
31 January Leader: Roger Taylor (731-9270)
8:00 a.m. Meet: National Museum of Natural Sciences, Metcalfe
and McLeod Streets, front entrance
Cost: None
This half day outing in the Ottawa area will include
a visit to at least one of the Club feeders. Dress
warmly and bring a snack.

Saturday WINTER LANDSCAPE INTERPRETATION
6 February Leader: Isabel Bayly
10:00 a.m. A fascinating and popular study of nature in winter.
Those members wishing to go on this snowshoe outing
must register by telephoning the Club number (722-
3050 after 10 a.m. only) in advance, on a first come,
first served basis. Snowshoes and warm clothing
(in layers) are essential. Bring a snack.

Copies of recent issues of *Trail & Landscape* are available at
\$2.00 each from The Ottawa Field-Naturalists' Club, Box 3264,
Postal Station C, Ottawa, Ontario K1Y 4J5.

Tuesday
 9 February
 7:00 p.m.

OFNC MONTHLY MEETING
 Backpacking in Canada's Most Northerly National Park
 Speaker: Roy Hamaguchi
 Meet: Auditorium, National Museum of Natural Sciences, Metcalfe and McLeod Streets
 Auvittuq National Park is located on Baffin Island just north of the Arctic Circle. Its rugged terrain and everchanging weather present a challenge to mountain climbers and backpackers alike. Roy will present colour slides taken during his solo backpacking excursion across the park, showing a variety of land-scapes, flora and fauna. He is a freelance photographer living in Ottawa.

Friday
 18 February
 10:00 a.m.

TREES OF THE OTTAWA AREA
 Leaders: Members of the Botany Study Group and Paul Catling
 Meet: National Museum of Natural Sciences, Metcalfe and McLeod Streets, front entrance
 There are about forty species of trees in the Ottawa area, none of them rare. The Botany Study Group has located a representative tree of each species and prepared a map of their locations. This work makes it possible to see all the species in one day. Habitat, range and usefulness of each species will be discussed. Those members wishing to participate must register at least ten days in advance by telephoning the Club number (722-3777) after 4 p.m. only. The Museum's Dinobus will be used for transportation. Bring a lunch.

All Members Please Note:

1982 membership fees are now due. Please renew promptly; late renewals entail extra work and add to your Club's expenses.

Members who have not renewed their membership by February 1st will not receive any more issues of the Club's newsletter.

Missed issues will be available to those who renew late at a cost of \$1.00.

All Club members are invited to join the Members' Dinner held at the Club's annual meeting.

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